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

1742

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Correspondence

Manuscripts are to be sent to

The Editor

Det Kongelige Danske Videnskabernes Selskab

H. C. Andersens Boulevard 35

DK-1553 Copenhagen V, Denmark.

Tel: +45 33 43 53 00

E-mail: kdvs@royalacademy.dk.

www.royalacademy.dk

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Editor Marita Akhøj Nielsen

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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

Synopsis

This volume represents the proceedings of a symposium held in 2011 on the occasion of the 250th anniversary of the Royal Danish Expedition to Arabia Felix, the Arabian Journey, which lasted from 1761 to 1767. Apart from new studies of the Danish expedition, the proceedings include analyses of other scholarly expeditions and voyages from the eighteenth and early nineteenth century, placing the Danish expedition in a broad context of early scientific expeditions. This was a time when the coastlines of continents, except in the Pacific and the Polar regions, were reasonably well known. Yet scientific knowledge about natural history and detailed geography of the interior of the continents other than Europe, as well as scholarly understanding of foreign cultures, both ancient and contemporary, was still limited.

Increasing focus on land-based travels in the eighteenth century and onwards meant more and longer encounters with local populations. Most studies in this volume focus on expeditions that involved contacts between local people and travelling European scientists and scholars. Others examine the scholarly questions which the scientific expeditions and travellers were sent out to solve and how observations were brought back to Europe and communicated both to other scholars and to the general reading public. The contrasts between the "gentleman travellers"

or the authors of entertaining travelogues and the scholarly approach of the Danish expedition are also apparent in several accounts.

Together, the papers in these proceedings paint a varied picture of eighteenth and early nineteenth century scientific expeditions and scholarly travel. In the eighteenth century the considerate and careful approach of Niebuhr and Forsskål in their dealing with local people was new or at least not so common, and Niebuhr and Forsskål's methods in acquiring local knowledge seem to mark a new departure for the study of foreign cultures and their interaction with nature.

A conclusion drawn by several of the papers in this symposium is that, in spite of careful preparations, elaborate apodemics and detailed instructions given to the travellers, many of the most surprising, innovating or lasting results of the expeditions were achieved either due to casual events or in cases where the travellers did not strictly follow the research plans outlined for them, but improvised and grasped unpredicted opportunities for research that offered themselves during the journey. Both careful planning and extensive flexibility have been major reasons for success in the early scientific expeditions and travels dealt with in this volume.

Ib Friis
Natural History Museum of
Denmark
University of Copenhagen
Denmark

Michael Harbsmeier Department of Culture and Identity Roskilde University Denmark. Jørgen Bæk Simonsen Department of Cross-Cultural and Regional Studies University of Copenhagen Denmark

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Introduction

Ib Friis, Michael Harbsmeier and Jørgen Bæk Simonsen

This volume contains the proceedings of a symposium held at the Royal Danish Academy of Sciences and Letters on the 27th and the 28th of October, 2011, to mark the 250th anniversary of the Royal Danish Expedition to Arabia. The title of the symposium was World views and local encounters in early scientific expeditions 1750-1850, and the intention was to place the Royal Danish Expedition to Arabia in a broad context of expeditions and scientific travels between 1750 and 1850, and to focus on the world views of the planners and members of the expeditions and their encounters with cultures and nature other than the European.

The symposium was part of a series of events in Denmark and in various places in the Middle East to celebrate the Danish expedition which in the eighteenth century was commonly known as the Arabian Journey (from Danish Den Arabiske Rejse, also translated as the Arabian Voyage) or the Royal Danish Expedition to Arabia Felix. Now, however, the expedition is inseparably connected with the name of Carsten Niebuhr," the only survivor of the expedition and its principal chronicler, and it is therefore often referred to as Carsten Niebuhr's expedition. The members of the expedition departed from Copenhagen on the Danish naval vessel Groenland on the 4th of January 1761, and that date was taken as the starting point for commemorative events during the entire year of the 250th anniversary, with support from both the Danish Ministry of Foreign Affairs and the Danish Ministry of Cultural Affairs, as well as a range of other cultural and academic institutions and funds.

However, although the *Arabian Journey* was one of the most important scientific expeditions in the era of eighteenth-century European scientific exploration and investigation, the reasons for all these celebrations in 2011 were certainly not all academic. One of the motivations for the strong involvement of both the Danish Ministry of Foreign Affairs and the Ministry of Cultural Affairs was a severe political crisis between Denmark and a number of countries in the Middle East, the so called "cartoon crisis", which started in the autumn of 2005. In order to mitigate the mood of crisis and tension, which persisted even five years after it first appeared, it was planned that many activities to celebrate Carsten Niebuhr and the *Arabian Journey* during 2011 should take place in the capitals of a series of Near Eastern countries that had been visited by the expedition 250 years ago. In addition a complete translation into Arabic of Carsten Niebuhr's published travel accounts was contemplated at that time.

But due to the political developments in the Middle East, known as the "Arab Spring", which began in December 2010 and developed into a wave of demonstrations, protests and political changes in the Arab world, many of the plans for commemorations in the Middle East had to be cancelled. In spite of this, the exhibitions, concerts and many other events that were to take place in Denmark were still carried out, including the symposium at the Royal Danish Academy of Sciences and Letters of which this volume represents the published proceedings.

The Organising Committee for the symposium consisted of a group of Danish scholars with strong interests in the culture, language, geography and natural history of the Middle East and in scientific expeditions of the eighteenth century: Professor, Fil. dr. et Dr. scient. Ib Friis, Natural History Museum of Denmark; Ph.D.-fellow Anne Haslund Hansen, the National Museum of Denmark; Associate Professor, Dr. phil. Michael Harbsmeier, Department of Culture and Identity, University of Roskilde; Ph.D. Brian Arly Jacobsen, Department of Cross-Cultural and Region-

^{1.} Fig. 1.

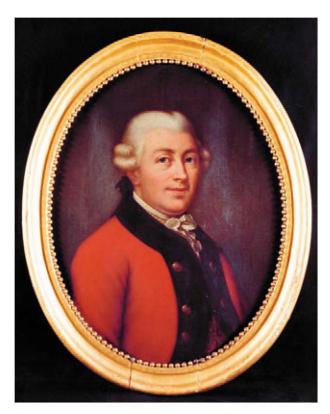


Fig. 1. Carsten Niebuhr. Painted 1773 in Copenhagen by unknown artist on the occasion of Nebuhr's marriage in September 1773 with Christiane Sophie Blumenberg. The portrait is private property and it is here reproduced with permission from the owner. It was photographed for *Carsten Niebuhr Biblioteket*, Vol. 1 (Niebuhr 2003); the publishing house Vandkunsten has provided the image and mediated the permission to publish.

al Studies, University of Copenhagen; Ph.D. Philippe Provençal, Natural History Museum Aarhus; Leading librarian and Head of the Oriental Department Stig T. Rasmussen, the Royal Library, National Library of Denmark and Copenhagen University Library; Professor, Dr. phil. Jørgen Bæk Simonsen, and Professor, Dr. phil. Jakob Skovgaard-Petersen, both at the Department of Cross-Cultural and Regional Studies, University of Copenhagen.

If the Danish expedition had been as well known in Germany as it is in Denmark, the celebrations might have been held a couple of years before the "cartoon crisis", namely in the year 2003, and at the Academy of Sciences in Göttingen, rather than the Royal Danish

Academy of Sciences and Letters. The very idea of sending an expedition to Yemen saw the light of day in a speech at the Göttingen Academy delivered by Johann David Michaelis on the 10th of November 1753.² Indeed in many ways the expedition was a Northern European project of the eighteenth-century enlightenment with its principal intellectual influences coming from Göttingen, Copenhagen and Uppsala, its sponsorship from Frederik V, the King of Denmark-Norway 1746-1766, and its leadership and administration from his ministers of state, J.H.E. v. Bernstorff and A.G. v. Moltke. However, the conceptual birth of the idea of the expedition passed unnoticed in 2003.

Nonetheless, in Denmark the year 2003 was significant for the memory of Carsten Niebuhr and the Arabian Journey because it was during this year that the first complete Danish translation of Niebuhr's famous account of the expedition, his three volume Reisebeschreibung nach Arabien und andern umliegenden Ländern came out as the first volume of a series of books in what is called Carsten Niebuhr Biblioteket [the Carsten Niebuhr Library], which by now comprises at least 23 volumes concerning the Middle East and the Muslim world, including the first publication, in Danish, of the diary of another member of the expedition, the philologist F.C. von Haven.³ Of course, even before

2. On that date Göttingen's Akademie der Wissenschaften, which had been founded in 1751, celebrated its anniversary. Michaelis was the Academy's first secretary; his post also involved editing and partly writing Academy publications, including Göttingische Anzeigen von gelehrten Sachen (Michaelis 1793, pp. 43-44). In the issue of that journal from 17th November, 1753, 139. Stück, pp. 1241-1244, Michaelis gave a summary of his speech and outlined what should be required of expeditions to the Palestine and Arabia and what such expeditions could achieve. The proposal that such an expedition should be organised and financed from Denmark came only later. See more about the background for the Arabian Journey in Lawrence J. Baack's paper in this volume and in Ulrich Hübner, "Johann David Michaelis und die Arabien-Expedition", in Wiesehöfer and Conermann (2002), pp. 363-402. A portrait of J.D. Michaelis from 1761 is reproduced with the article by Daniel Carey.

3. The three major volumes by Niebuhr now translated into Danish and available in the Carsten Niebuhr Library are:

2003, Carsten Niebuhr and the *Arabian Journey* had been the subject of a range of publications, meetings and exhibitions.

The first and very successful beginning of the renewed general interest in the Danish expedition to Arabia was marked by the publication in 1962 of Thorkild Hansen's novel Det Lykkelige Arabien: En Dansk Ekspedition, 1761-67, almost exactly 200 years after the departure of the ship Groenland from Copenhagen.4 The novel, translated into a range of languages, including Arabic, is a kind of written documentary fiction and the book is, at least in Denmark and partly also in the English-speaking world, probably to a lesser degree in other language-areas, largely responsible for the fact that a surprising number of people have heard about Carsten Niebuhr and the tragic death of the other members of the expedition. But Thorkild Hansen's novel is also the source of much misinformation and the reason for the widely held misconception that the expedition was a complete and tragic failure - all its scientific collections lost, its other scientific results forgotten and the many sacrifices of its members made in vain. According to Thorkild Hansen nothing was left to remind us about the Danish expedition to Arabia Felix, except for the troubling storyline of his book.

Fortunately Thorkild Hansen's assessment, poetic license taken into consideration, has been recognized as not being accurate, and eventually his popularized presentation has been corrected. For example, Hansen probably got his first knowledge about the Royal Danish expedition by reading about the already previously acknowledged scientific importance of the still existing herbarium and work of the naturalist of

Niebuhr (2003), Niebuhr (2004) and Niebuhr (2009). For the published diary of F.C. von Haven, see Haven (2005).

4. An English translation of Thorkild Hansen novel appeared in 1964, entitled *Arabia Felix: The Danish Expedition of 1761-1767*. Many other translations followed: a German translation in 1965, an Arab translation in 1983, a French translation in 1988, and a Dutch translation in 2005. For the titles of all these translations see Hansen (1962, 1964, 1965, 1983, 1988, 2005). Most translations seem to have appeared in several editions, and more translations in other languages may exist.



Fig 2. Peter Forsskål. Portrait painted in 1760 by P. Dahlman shortly before Forsskål left Sweden for Copenhagen and the Arabian Journey. The portrait is private property and preserved at Salnecke Manor, Uppland, Sweden. It was photographed for reproduction in *Tankar om borgerliga friheten - Thoughts on Civil Liberty* (Forsskål 2009). Courtesy of the photographer, Julia Gyllenadler; the image has been communicated by David Goldberg, co-editor of Forsskål (2009).

the expedition, Peter Forsskål,⁵ about whom specialised publications, mainly about Forsskål's botanical research, had been written in the first quarter of the twentieth century.⁶ And soon after Thorkild Hansen's novel appeared Danish scholars from natural history, but also from the humanities, began objecting to Hansen's negative view of the expedition's results and pointed out that although much had been lost, there were still important collections from the expedition in the main museums in Copenhagen, including the important natural history collections by Forsskål

^{5.} Fig. 2

^{6.} Christensen (1918; 1922); Schück (1923).

in Statens Naturhistoriske Museum [Natural History Museum of Denmark],⁷ collections of archaeological and ethnological objects made by Niebuhr in Nationalmuseet [National Museum of Denmark], books and manuscripts collected by von Haven in Det Kongelige Bibliotek [Royal Library / Danish National Library],⁸ documents in Rigsarkivet [the Danish State Archives]⁹ and in the Library of the Christian-Albrechts-Universität zu Kiel,¹⁰ as well as a wealth of valuable information and unique perspectives in Niebuhr's and Forsskål's publications.

Progressively the recognition of the expedition and appreciation of its cultural and scientific significance grew. This was marked in a number of ways. For example, Niebuhr's singular contribution to learning was acknowledged in 1982 when the University of Copenhagen opened Carsten Niebuhr Instituttet for Nærorientalske Oldtidskulturer [The Carsten Niebuhr Institute for Ancient Near Eastern Studies], combining the disci-

7. Mainly the Herbarium Forsskålii, which can be searched on http://plants.jstor.org/ with 'Collector: Forsskål'. Duplicate specimens of some of Forsskål's plant collections are located in the Botanical Museum of the University of Lund, the Herbarium of the Natural History Museum, London, and the Herbarium of the Christian-Albrechts Universität zu Kiel (Herbarium Universitatis Kiliensis). Forsskål's 'fish herbarium' is accessible on http://www.zmuc.dk/verweb/peter_forsskaal/ peter_forsskaal.html. A number of other preparations of animals from the expedition are also preserved with the zoological collections of the Museum; unfortunately all birdskins from the expedition were lost before reaching Denmark. 8. Examples of works that corrected Hansen's presentation with regard to the results of Forsskål's zoological studies on the Arabian Journey are e.g. Spärck (1963), Klausewitz and Nielsen (1965) and Wolff (1967).

9. The main parts of documents from the Arabian Journey are found in Tyske Kancelli, Udenrigske Afdeling, Realia, Den Arabiske Rejse I-III, 1756-70 (pakke 3-003, 004 og 005), Reviderede regnskaber, Videnskabelige Institutioner m.m., Kaptajn C. Niebuhrs rejse 1760-67 and Håndskriftsamlingen, XV. Speciel personalhistorie, Niebuhr-slægten (pakke 108). For other archival sources, see for example in Lawrence J. Baack's paper in this volume.

10. See digitized documents in Nachlass Carsten Niebuhr, 314.3. Zur Reisebeschreibung gehörende Dokumente und Manuskriptfragmente sowie Vorarbeiten zur Veröffentlichung der Aufzeichnungen Forsskåls – http://dibiki.ub.uni-kiel.de/viewer/resolver?urn=urn:nbn:de:gbv:8:2-1600225

plines of Egyptology, Assyriology and Near Eastern Archaeology. Then in 1992, the focus of the Institute was broadened to include linguistic scholars in Arabic, Persian, Turkish and Hebrew, and the name was changed to simply Carsten Niebuhr Instituttet for Nærorientalske Studier [The Carsten Niebuhr Institute for Near Eastern Studies]." Then pioneering exhibitions were held in Kiel and Copenhagen in 1986 and 1987, initiated by Stig T. Rasmussen, Leading Librarian and Head of the Oriental Department of Det Kongelige Bibliotek, together with Dieter Lohmeier, then Director of the Schleswig-Holsteinische Landesbibliothek [State Library of Schleswig-Holstein]. The exhibitions were accompanied by a very useful exhibition catalogue,12 which was soon followed in 1990 by the publication of a magnificent volume on the expedition in Danish, edited by Stig T. Rasmussen - Den Arabiske Rejse 1761-1767. En dansk ekspedition set i videnskabshistorisk perspektiv. 13 Reprinted in 1997, this book focussed on presenting the most important scholarly results of the expedition for a Danish-reading audience and was accompanied by beautifully reproduced illustrations from the expedi-

In 1994, the English botanist F. Nigel Hepper of the Herbarium, Royal Botanic Gardens, Kew, UK, and his Danish colleague Ib Friis, published a book analysing the botanical results which Forsskål had collected on the *Arabian Journey*, with an Introductory Essay. The book was published in English under the title *The Plants of Pehr Forsskåls Flora Aegyptiaco-Arabica*. ¹⁴ Subsequently Carsten Niebuhr, in a very broad con-

II. The development has since gone further. In 2004 Carsten Niebuhr Instituttet and all other institutes or departments at the University of Copenhagen dealing with language, culture, religion and society in the world outside the majority-cultures of Western Europe and the Unites States of America merged to form Institut for Twarkulturelle og Regionale Studier (ToRS) [the Department of Cross-Cultural and Regional Studies], with the staff of the former Carsten Niebuhr Institute forming a section.

^{12.} Rasmussen (1986).

^{13.} Rasmussen (1990). The English translation of this title is *The Arabian Journey 1761-1767. A Danish expedition seen in perspective of the history of science*, but a translation has never been published. 14. Hepper and Friis (1994).

text, was the subject of an interdisciplinary conference held in Eutin, Schleswig-Holstein in October 1999. The papers presented at the conference resulted in a substantial volume of proceedings, published in 2002 under the editorship of Josef Wiesehöfer and Stephan Conermann as Carsten Niebuhr (1733-1815) und seine Zeit.15 Also Dieter Lohmeier published a series of significant, archivally based articles and essays on various aspects of the expedition in journals and books published in Denmark and Germany.¹⁶ Finally, symbolic of the heightened awareness of the importance of the expedition, 2009 saw the naming of a newly established street in Copenhagen as the Carsten Niebuhr Gade. It joins appropriately the much older Bernstorffsgade, named for J.H.E. Bernstorff, the Danish Minster of Foreign Affairs who together with Moltke, the Lord Chamberlain to Frederik V, played such a central role in the sponsorship and leadership of the expedition.

However, nearly all of these activities have been meetings, exhibitions or publications using the Danish or German languages. Comparatively little has been written in English about Carsten Niebuhr and the Arabian Journey in general, if we exclude the English translation of Thorkild Hansen's novel and a few specialist publications about the various academic fields covered by the expedition. For the English speaking world, the only readily accessible resources in that language remained two very old works. One is the biography, or rather really lengthy obituary, of Carsten Niebuhr by his, for quite different reasons very famous, son, the historian Barthold Georg Niebuhr. It appeared in English translation in 1835 in a series of biographies of prominent people, but it attracted little notice and seems to have served mainly as morally edifying reading for young people.¹⁷ More importantly, an English translation of selected texts and with some redrawn illustrations from Niebuhr's publications about the Arabian Journey was produced

by the Scottish author and journalist Robert Heron, published in 1792 in Edinburgh. This book, issued in two volumes, has often been reprinted and is now freely available on the internet.¹⁸

Heron's corrupted translation and adaptation was not a good beginning for the reputation of Niebuhr and the *Arabian Journey* in the English-speaking world: Heron almost certainly made his translation from one of the shortened French translations that appeared in 1779 or 1780, not from the original German edition, and took great liberties in his rendering of Niebuhr's texts. The translation did not include all of Niebuhr's publications, only extracts from the first volume of the Reisebeschreibung, extracts from Beschreibung von Arabien, and the first pages of the second volume of the Reisebeschreibung, ending the account with Niebuhr in Bombay in 1764, three years before the end of the expedition, and claiming, in Heron's Preface, that Niebuhr only "remained in the East as soon ... till he could find a fit opportunity of returning safe into Europe, with the collection of curiosities which was left in his hands." Heron's edition systematically eliminated those passages which frequently distinguished Niebuhr and the Arabian Journey from other contemporary expeditions and travellers. To cite just one of many examples, Heron edited a passage from Niebuhr's text describing an experience in the Nile delta as follows. It reads:

Near a village of the Delta, an honest peasant paid great attention to my operations, as I was taking different angles. To shew him something curious, I made him look through the same glass. He was greatly alarmed to see the village, to which he belonged, standing upside down. My servant told him, that Government were offended with that village, and had sent me to destroy it. He instantly intreated me to wait but a few moments, that he might have time to save his wife and his cow. He then ran in great haste towards his house; and I went again on board my boat. ¹⁹

^{15.} Wiesehöfer and Conermann (2002).

^{16.} Lohmeier (2008, 2010a, 2010b, 2011); Lohmeier and Rasmussen (2011).

^{17.} Niebuhr (1835).

^{18.} Niebuhr (1792). Digital facisimile edition by Google available on http://books.google.dk/books?id=5P8vAAAAYAAJ

^{19.} Niebuhr (1792), p. 39.

Here the translation stops, whereas Niebuhr continues with the following contextual observation:

One therefore should not be surprised that the Muslims get suspicious about such observations, since one also not too long ago has found enough Europeans who took everything, which they could not understand immediately, for sorcery.²⁰

According to the Oxford Dictionary of National Biography, Heron was busy indeed when working on this abbreviated translation of Niebuhr.21 "Borne down by drink and debt, he was thrown into prison by his creditors", but despite these difficulties, 1792 was, the Dictionary continues, the best of his years with regard to his output of printed matter, since in addition to reformulating and translating Niebuhr's publications, he also managed to publish a translation of Jacques Cazotte's Mille et une fadaises, Contes a dormir debout as simply Arabian Tales. Then in addition he wrote a book called *Elegant* Extracts of Natural History, a whole volume entitled Observations Made in a journey through the Western Counties of Scotland in 1792 (still an account of interest according to the Dictionary), and at the same time worked on a major study, namely his History of Scotland, which soon came out in six volumes from 1794-1799. After making progress on some of these projects he was freed from prison on the condition that two-thirds of his remuneration for the books would go to his creditors. In short, there was not much time for great attention to crafting a reliable, accurate translation of Niebuhr's works. Moreover, in Heron's English translation Niebuhr's illustrations did not fare any better than the text, as we learn in this volume from Anne Haslund Hansen's analysis of the illustrations in Niebuhr's Beschreibung von Arabien, the three volumes of the Reisebeschreibung and Heron's version. Thus both the quantity and quality of the sources in English on the expedi-

20. Niebuhr (1774), p. 50: 'Man darf sich eben nicht sehr verwundern, dass die Mohammedaner über dergleichen Beobachtungen argwöhnisch werden, da man nicht vor langer Zeit auch noch Europäer genug gefunden hat, die alles für Zauberey hielten, was sie nicht gleich begreifen konnten.' 21. Henderson (2004).

tion to Arabia Felix are deficient and raise a variety of issues.

This symposium is an appropriate opportunity to enhance understanding of the significance of Carsten Niebuhr and the Arabian journey in the English speaking world. Real change in Anglophones' view of Carsten Niebuhr and the Arabian Journey will surely come about with the appearance of Lawrence J. Baack's forthcoming book-sized study of the planning and carrying out of the Danish expedition and of its results and scientific importance. We are all looking forward to this book to be entitled Undying Curiosity: Carsten Niebuhr and the Royal Danish Expedition to Arabia, 1761-1767. Meanwhile, we hope that the present volume will provide a useful complement to Lawrence J. Baack's book and throw a light on the expedition which is decidedly different from that of Heron's presentation of both Niebuhr and the Arabian Journey. The symposium has also been an opportunity to look at scientific expeditions in the second half of the 18th and first half of nineteenth century in general and place the Arabian Journey in that wider context.22

The Arabian Journey had in fact a precursor: a Danish expedition to Egypt and Nubia, undertaken by the Danish naval officer Frederik Ludvig Norden in 1737-1738. Although the results of this expedition were published in French, English and German in the eighteenth century, and, in 2010, in a magnificently produced Danish translation, this expedition is prob-

22. Also neglected aspects of the work of Peter Forsskål, his publications on politics and civil liberty, are now subject to new awareness in the English speaking world and elsewhere. Already during his studies with Michaelis in Göttingen Forsskål was exceptionally outspoken in matters relating to politics and liberty (Michaelis 1793, pp. 64-66). Forsskål's publication on civil liberty and the freedom of speech (Forsskål 1759) was banned in Sweden immediately after its publication; this ban was undoubtedly an important reason why Forsskål decided to accept the post as member of the Arabian Journey. Forsskål's original Swedish text was republished in 2009, together with an English translation (Forsskål 2009) and translations into French, German, Spanish, Italian, Greek, Turkish, Russian, Hebrew, Arabic and Chinese have been made available on the World Wide Web (http://www.peterforsskal.com/thetext-ma.html).

ably even less known in the English-speaking world than the Arabian Journey.23 Norden's expedition is not given a full treatment in any paper in this symposium, and its achievements and relation to the Arabian Journey are therefore briefly summarised here. Initially Norden's voyage was not a scientific expedition. The Danish King Christian VI sent Norden to Egypt together with a French count, Pierre Josef le Roux d'Esneval and a small party. D'Esneval had convinced the King that commercial links between Denmark and Ethiopia (Abyssinia) would be profitable and that such links could best be established by sending a Danish mission along the Nile and the Blue Nile to the Abyssinian Emperor. Norden, who was a competent draughtsman and had acquired a profound knowledge of art, architecture and ancient history during travels in the Netherlands, France and Italy, was the official representative of the King on the expedition.

The party landed at Alexandria, where Norden, like Niebuhr did later, drew and measured the Column of Pompey and the obelisk of Cleopatra. Near Cairo, he also, like Niebuhr did later, studied and drew the great pyramid complexes at Giza: the pyramids of Cheops, Chephren and Mycerinus, the Great Sphinx and one of the smaller pyramids. The party continued up the Nile by boat. In spite of difficulties with getting ashore, Norden drew the old pyramids at Meidum and Dashur, drew and mapped monuments

23. The first edition of Norden's Voyage (Norden 1755) was in large folio with 159 copper plates based on Norden's own drawings. A complete and commented translation into English with the original copper plates (Norden 1757) was published shortly after. About 20 years later the English edition was translated into German (Norden 1779), and about 40 years later an enlarged and commented French edition (Norden 1795-1798) was published in quarto. Abbreviated versions with few or no plates have also been published (see Lomholt 1960, pp. 95-100). Several works analyze Norden's voyage and travel account and drawings in considerable detail: Lomholt (1960, 1961), Kjølsen (1965), Buhl, Dal & Holck Colding (1986) and an introduction to a new Danish translation of Norden's work (Norden 2010). Norden's original drawings from the journey were published and commented by Buhl (1993).

at Karnak, Luxor and Thebes, including the Memnon Colossi and the Ramesseum, as well as the temples at Philae. After changing boat at Aswan and the First Cataract, the party continued up the Nile for about 200 km, as far as the Nubian village of al-Dirr near the Second Cataract. Hostility of the people along the river made further progress impossible, and the plan of reaching Abyssinia along the Blue Nile had to be abandoned. In Nubia Norden was the first to make scholarly observations and to draw the ancient ruins. Returned to Denmark, Norden was asked by Christian VI to prepare his manuscripts and drawings from the journey for publication. Norden began drafting the text in French and found an artist to etch the plates, but died in Paris in 1742 with the work unfinished. In 1746 Christian VI died and was succeeded by Frederik V. The new King entrusted the Royal Danish Academy of Sciences and Letters, founded by Christian VI in 1742, to publish Norden's work. This resulted in 1755 in two volumes in folio, Voyage d'Egypte et de Nubie, with 159 plates of Egyptian monuments, contemporary topography and technology.

Norden's meticulously executed drawings of Egyptian monuments won almost immediately approval, and the success of Norden's voyage was undoubtedly of importance for the Arabian Journey. The liberality with which Christian VI had sponsored Norden's expedition to Egypt and how, afterwards, Frederik V and the Royal Danish Academy of Sciences and Letters had supported the publication of Norden's work inspired Michaelis when he asked the Danish government to support further studies in the Orient. In a letter dated 20th of May, 1756,24 nearly a year after the publication of Norden's Voyage, Michaelis applied to the Danish minister, J.H.E. Bernstorff, asking for support for two of his students, a certain Strøm from Norway and F.C. von Haven from Denmark, to allow them to study Arabic in preparation for further travels to the Arab world. Michaelis argued that knowledge of Arabic was essential for scholarly travellers in the East, and even Norden's Voyage contained errors caused by Norden's lack of proficien-

^{24.} The letter is here cited from Christensen (1918), p. 2.

cy in that language. More letters were quickly exchanged between Michaelis and Bernstorff, and by the 3rd of August Michaelis had drafted preliminary instructions for a scholar to be sent to Arabia Felix. 25 § 5 of this preliminary instruction discussed Oriental place names, which should be recorded with Arab characters, as in Norden's work. In §14 and 15 in the same draft Michaelis pointed out how cheaply one could travel in the Orient and flattered the King: "How much did Norden's voyage cost? What an excellent present to science from the nation of Denmark. I have read the reviews ... But I expect new and useful result from a voyage to Arabia Felix, and I expect these results will undoubtedly exceed the result of that beautiful travel account [Norden's Voyage]." The final Royal Instruction does not mention Norden, but it is highly likely that \$10 - about how the travellers should behave when dealing with the local population - is inspired by Norden's experiences,26 for example that travellers should follow local tradition with regard to clothing, avoid all quarrels with Arab and Turkish men and any amorous approaches to Arab women.27 In §29 of the final Royal Instruction Niebuhr is, as in Michaelis's first draft, requested to record Oriental place names with Arab characters.

That Norden's Voyage was in some ways considered a model for the Arabian Journey is also notable in the writings by Niebuhr and von Haven about Egypt. Niebuhr mentions Norden's observations rather frequently in the parts of the Reisebeschreibung that dealt with Egypt, and sometimes Niebuhr used Norden's work as a standard for his own. Although Norden had provided a good drawing of the Column of Pompey in Alexandria there were still doubts about its exact height, and Niebuhr therefore made precise observations of this. Niebuhr pointed out that he made detailed maps of the Nile Delta because such a map was lacking in Norden's work, but also stressed: "I do not believe that any of the many visitors to Egypt has produced as reliable maps of the country as P. Sicard²⁸ and Captain Norden, and neither of these had the opportunity to test their maps with astronomical observations." Both Niebuhr and von Haven commented positively on the reliability of Norden's drawings and maps of ancient monuments and contemporary Egyptian topography.29

Norden's main achievements are his insightful observations and drawings of ancient Egyptian monuments and contemporary towns and his carefully done sketch maps of the Nile from Cairo to al-Dirr, represented on 29 partial maps with indication of all villages and ancient ruins he saw, as well as two overview maps. Niebuhr did not specifically mention Norden's drawings of water-lifting implements, boats, sophisticated incubators for eggs and other agricultural machinery, but also Niebuhr's Reisebeschreibung contains detailed studies of such technologies, most likely inspired by Norden. Unlike the archaeological and topographic observations, Norden's observations on natural history were restricted and not in any way comparable with Forsskål's research during the Arabian Journey. Norden identified the ibis of classical authors with the bird he called "Pharaoh's Chicken."30

^{25.} The letter is reprinted in Michaelis (1794-1796), no. 82. 26. See Paul John Frandsen's introduction to Norden (2010), p. XLIV. Norden's advice to future travelers can be found in Norden (1755), pp. 39-44.

^{27.} The idea that European travellers should avoid offence by wearing local style clothes and behave in agreement with the local norms became well established the 19th century. Like Niebuhr, who sometimes travelled under the names of Kawâdja Abdallah or Abdallah Aqa, the Swiss Orientalist Johann Ludwig Burckhardt (1784-1817) adopted the identity of Sheikh Ibrahim Ibn Abdallah and travelled 1809-1817 in Syria, Egypt, Nubia and Arabia (Hallett 1965, pp. 366-378). The British explorer Richard Burton (1821-1890) in 1853, familiar with the customs and behaviour of Muslims and dressed like a Muslim pilgrim, made the first hajj to Mecca known to have been completed by a European (Burton 1855-1856). But in the 18th century the considerate and careful approach of Niebuhr and Forsskål in their encounters with local people was new or at least not common, and Niebuhr and Forsskål's methods in acquiring local knowledge seem to mark a new departure for the study of foreign cultures and their interaction with nature.

^{28.} Pére Claude Siccard (1677-1726), a French Jesuit who lived and travelled in Egypt from 1712 to his death.

^{29.} See for example Niebuhr (1774), pp. 48, 60, 70, 99, 115 and 124; Haven (2005), pp. 236-237, 258, 282, 306, 310 and 311. 30. On Plate 33and in the text it is also called 'Poulle de

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Fig. 3. Frontispiece for F.L. Norden's Voyage d'Egypte et de Nubie, published 1755 by the Royal Danish Academy of Sciences and Letters. The frontispiece was designed and etched after Norden's death by Marcus Tuscher under the auspices of members of the Academy. Reproduced from a copy in the possession of the Academy.





Fig. 4. Title vignette of Carsten Niebuhr's *Beschreibung von Arabien* (Niebuhr 1772), reused for the two volumes of his *Resebeschreibung* (Niebuhr 1774-1778) that appeared during his lifetime. The signatures (not reproduced here) include the initials of the designer, "I.W. inv.", which must stand for the sculptor Johannes Wiedewelt, while "I. F. Clemens Sculp." shows that the etching was done by the engraver Johan Frederik Clemens. From the title page of the first volume of Resebeschreibung, as rendered in Carsten Niebuhr Biblioteket, Vol. 1 (Niebuhr 2003).

He drew a praying mantis (*Miomantis* sp.) and an unidentifiable mosquito (both in Plate 32), a number of cultivated plants (a banana and a cypress in Plate 33, the ornamental tree *Cassa fistula* from India in Plate 54, the sycamore-fig (*Ficus sycomorus*) in Plate 38) and a native plant from Nubia, called *oschar* (*Calotropis procera*) in Plate 59. Forsskål's publications from the *Arabian Journey* do not mention Norden's observations of Egyptian fauna and flora.

Differences between Norden's *Voyage* and Niebuhr's and Forsskål's publications can be illustrated by a comparison of the frontispiece of Norden's *Voy*- age³¹ with the title vignette of Niebuhr's publications.³² The frontispiece in Norden's *Voyage* is a grand emblematic representation of Egyptian antiquities with references to antique mythology and classical authors: Danish scholarship is personified by the central figure, Pallas Athene, carrying a staff with the Greek letters XP (for Christ) instead of her spear. Standing under the winged goddess Fama, wearing a regal ermine-lined cloak and with a male lion holding the Danish coat of arms, she points towards Egyptian an-

^{31.} Fig. 3.

^{32.} Fig. 4.

tiquities and a woman, who is a personification of ancient Egypt. Some of the antiquities are derived from Norden's drawings, such as the Canopic jar from Plate 55 and, in the remote background, the Memnon Colossi from Norden's Plate 110. In the foreground rests a man, personification of the Nile, with an oar or a rudder. The representations of animals refer to classical legends about Egypt. The bird eating a snake in the foreground is an ibis; according Herodotus' Histories (Book 2, Chapter 75) the ibis is a useful bird that eats snakes, particularly winged snakes that come flying to Egypt from Arabia. The biological fact is that all species of ibis have long, down-curved bills used for feeding on crustaceans and insect larvae in mud or shallow water. The bird in front of the crocodile in the foreground represents a "trochilus", a legendary Egyptian bird, which, according to Herodotus (Histories, Book 2, Chapter 68), is supposed to fly into the mouth of a crocodile and feed on scraps of food and leeches. This legend has later been associated with the Egyptian plover (*Pluvianus aegyptius*), a bird sometimes seen near crocodiles on river banks, but the story about birds cleaning the mouth of crocodiles is now considered legendary. The representations of Egyptian plants are more realistic, apart from the date palms to the left in the frontispiece, the fruits of which look more like coconuts than dates. Behind the obelisk one sees the leaves of a banana, and the plant in front of the ibis is the oschar (Calotropis procera) of Plate 59.33 It is as if the designer of the frontispiece has wanted to make up for the scanty observations on natural history by adding references to anecdotes from Herodotus. Norden's text does not contain these legendary references; the frontispiece was designed and etched by the German artist Marcus Tuscher under instruction of members of the Danish Academy.34

Niebuhr's smaller title vignette35 is also emblematic, but quite unpretentious in comparison with the frontispiece for Norden's Voyage. The two women in Niebuhr's vignette impersonate scholarly activities, but do not agree with any of the classical nine Muses. The woman to the left does not hold a celestial globe, the usual attribute of Urania, Muse for Astronomy, but a ruler and a compass used for measuring a distance on a globe representing the Earth. On the globe one can see the Arabian Peninsula and the word Asia. The woman to the right holds what seems to be a telescope and has a crown of stars; apparently she represents astronomical observations. The title vignette is a simple, decorative element in the book; it has classical allusions, but refers only to scientific observations on the Arabian Journey. There are only 17 years between the publication of Norden's Voyage and Niebuhr's first book about the Arabian Journey. Although the Danish Academy and Niebuhr had unequal financial capacity, yet the difference between the publications resulting from the two important Danish expeditions to the Orient seems also to demonstrate a striking change in attitudes to scholarship over short time.

As intended, the proceedings in this volume cover a wide array of topics, ranging geographically from Siberia via the Middle East and the Red Sea to Hawaii, and chronologically from the longue durée of apodemics (i.e. instructions about or manuals in the art and science of travelling) and the scientific instructions from the late sixteenth century onwards to some of the last polyhistors travelling in Arabia and Abyssinia, keenly interested in natural history, archaeology and old manuscripts. Neither the symposium, nor these proceedings contain comprehensive treatments of all parts of the Arabian Journey, let alone touch upon a majority of early scientific expeditions between 1750 and 1850. Some readers may miss treatments of Carsten Niebuhr's studies in India, his observations on his long journey home through the countries that

^{33.} This wild plant was already observed by Prospero Alpini, who saw it near Alexandria and illustrated it as *Beidelsar* (Alpini 1592, Plate 86).

^{34.} Lomholt (1960), pp. 75-97, 100, describes how production of copper plates, printing and publication of Norden's *Voyage*, and subsequently sale of the copper plates to English publishers, was discussed in plenary meetings of the Academy

during the years 1747-1757. See also Lomholt (1960), pp. 85-87 and Paul Johan Frandsen's introduction to Norden (2010), pp. XLIV-XLVI.

^{35.} Fig. 4.

are now Oman, Iran, Iraq, Syria, Cyprus, Palestine, Turkey and Eastern Europe or a discussion of his careful studies of the cuneiform writing in the ruins of Persepolis. However, systematic evaluations of Niebuhr's observations in all parts of the *Arabian Journey* have been published previously in the proceedings by Wiesehöfer and Conermann from the Eutin symposium in 1999.³⁶

Also missing in these proceedings are treatments of many other important expeditions in the period 1750-1850. The great British and French naval expeditions to the Pacific are only marginally touched upon here: the French global circumnavigation in 1766-1769, led by Louis Antoine de Bougainville, and the three circumnavigations lead by James Cook, in 1768-1771, in 1772-1775 and in 1776-1779. These expeditions combined mapping of uncharted land and islands in the Pacific with a variety of other observations and scientific studies, and they involved encounters with people that had never met Europeans before. Cook's first expedition observed a passage of Venus from Tahiti and explored the coasts of New Zealand and the eastern coast of Australia. 37 Cook's second expedition explored the southern part of the Pacific via visits to Tahiti and New Zealand, continuing southwards until the expedition nearly touched Antarctica at 70° 10' S, followed by landing on hitherto unknown islands in the western Pacific, including the New Hebrides (now Vanuatu) and New Caledonia.³⁸ Cook's third expedi-

36. In Wiesehöfer and Conermann (2002): Egypt (Lucian Reinfandt, pp. 105-120), Sinai (Detlev Kraack, pp. 121-154), Yemen (Friedheim Hartwig, pp. 155-202), Indian antiquities (Martin Brandtner, 203-266), contemporary Iran (Birgit Hoffmann, 287-300), Constantinople and the Ottoman Empire (Gottfried Hagen, pp. 301-324). 37. The literature on the 18th century Pacific voyages is enormous and includes much that does not represent scholarly research. Recent overviews of Cook's expeditions are Rigby and Merwe (2002) and Thomas (2003). 38. An illustration from Cook's second expedition by the artist William Hodge, The Landing at Erramanga, one of the New Hebrides, has been reproduced as Fig. 12 in Anne Haslund Hansen's article in this volume. Members of Cook's expedition escape by boat from a party of local inhabitants on the shore of the island of Erromango, now part of Vanuatu. Such dramatic

tion focussed on the northern Pacific where, in January 1778, the expedition came to the Hawaiian Islands, hitherto not marked on European maps,39 and made the first contacts with the Hawaiians. From Hawaii the expedition continued as far north as 70° 30' N in present-day Alaska and thereby crossed the route followed in 1841 by Bering.40 During a second visit to Hawaii in February 1779 violent conflicts broke out between members of the expedition and local inhabitant and Cook was killed in a confrontation at Kealakekua Bay on the west coast of Hawaii.41 Other important naval expeditions went to the western coast of North America and the Arctic during this period, including the expedition lead by Gorge Vancouver in the years 1791-1795. It was again a global circumnavigation, but the main task was to continue Cook's exploration of western coast of North America. British expeditions in 1818 and 1829-1833, lead by William Edward Parry and John Ross, went to Baffin Bay, between Greenland and Canada, and continued along the northern coast of North America, hoping to find a connection between the Atlantic and the Pacific Oceans. In 1818 John Ross made the first contact with

interactions between expedition members and local population are not found in the illustrations from the Arabian Journey, where members of the expedition are observers, as shown in the illustration Kriegsübungen der Araber in Yemen (Fig. 2 in Anne Haslund Hansen's article). A drawing in pen and watercolours by John Webber, artist on Cook's third expedition, is entitled A Human Sacrifice at Otaheiti [Tahiti] and shows the ceremony at Attahouroo [Utuaimahurau] on the 1st of September, 1777, after the sacrificed man has been killed. (British Library Add.Ms 15513f.16). Cook and one of his officers are witnesses, as are the three members of the Danish expedition in Kriegsübungen. 39. Fig. 5 shows a map of the world that was widely circulating at that time (Prinald 1766). The map reflects the knowledge of the world by the middle of the 18th century, including the parts of the Aleutian Islands ("Land discovered in 1741") and the part of Alaska ("Discovered in 1741") that were discovered during Bering's second expedition. The Hawaiian Islands are not indicated; they were, as mentioned, discovered by Captain Cook only in 1778.

40. See paper by Peter Ulf Møller in this volume.

41. Liebersohn's article in this volume illustrates the development only 40-50 years after the first meeting between the Hawaiian population and Cook's expedition.

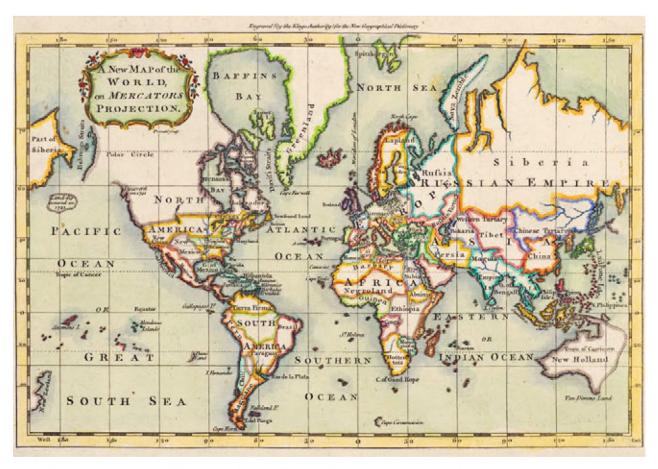


Fig. 5. Prinald's map of the world from 1766: A New Map of the World, on Mercators Projection. Engraved by the King's authority for the New Geographical Dictionary (Prinald 1766). Hand coloured version; original size 18 x 27 cm. A digital image of this version of Prinald's map was provided by the owner, the Special Collections of the University of Texas at Arlington Library, Arlington, Texas, and it is reproduced here with permission [00387, 126/10].

the extremely isolated Polar Eskimos, the Inughuit, at Cape York on the north-west coast of Greenland.

At the beginning of the period dealt with here the main coastlines of the continents had become quite well known, with the exception of the coasts and islands of the Pacific and the Polar regions that were the subject of Bougainville's, Cook's, Vancouver's, Parry's and Ross' naval expeditions. Yet the academic knowledge remained limited about the natural history and the detailed geography of the interior of continents other than Europe, as well as the scholarly understanding of foreign cultures, both ancient and contemporary. After the beginning of the nineteenth century major expeditions went increasingly over

land, like the *Arabian Journey*, for example Meriwether Lewis and William Clark's expedition across the North American continent in 1804-1806, or Alexander von Humboldt's extensive travels and scientific observations in South America during the years 1799-1804. Gradually the focus of exploration changed from sea voyages aimed at discovering new routes of navigation or trade, new islands, or indeed new continents, to travels into the interior of continents. Travel over land meant that the travellers had more frequent and sustained encounters with local populations and other travellers.

In the first planning stages the symposium had a slightly different working title, *Local encounters and reli-*

gious reflections in Early Scientific Expeditions. The subsequent title of the symposium, World Views and Local Encounters in Early Scientific Expeditions 1750-1850, indicated a wish to bring together a number of scholars to look at early scientific expeditions in a wider perspective, religious and secular. However, as the planning of the symposium and the proceedings progressed the Committee realised that focussing more on Niebuhr and the Arabian Journey would be necessary, and the title of the proceedings has therefore finally become: Early $Scientific\ Expeditions\ and\ Local\ Encounters$ – $New\ Perspectives\ on$ Carsten Niebuhr and The Arabian Journey. A majority of the papers in this volume have focus on the Arabian Journey and other expeditions to the area around the Red Sea. The sequence of the papers mainly reflects the chronology of the expeditions.

Daniel Carey's contribution sets the work of Niebuhr and Forsskål in a long durée of attempts, from the late sixteenth to the eighteenth century, to organize scientific travel and expeditions in order to promote and regulate observation, and to make travelling more scientifically productive by formulating questions to be addressed during the travels. Over this same period an extensive literature of instruction and advice also appeared, beginning in the sixteenth century with the Humanist intervention to reform travel in the 1570s, together with the instructions issued by trading companies for a variety of voyages. These efforts took on a new impetus under the auspices of the Royal Society in the 1660s as it formulated inquiries for different countries and supplied more general advice on what to observe for travellers and mariners. Viewed from this perspective, the extensive guidelines and questions devised by Johann David Michaelis and his colleagues for the Arabian Journey represent the culmination and synthesis of long standing attempts to make travel productive of new knowledge.

Peter Ulf Møller's contribution makes the comparison between Vitus Bering's Russian Kamchatka Expeditions (1725-30 and 1733-43) and the *Arabian Journey*, attempting to identify some similarities, but also to set off the uniqueness of the two Russian expeditions. The title of the paper, *Long Transit to the Unknown*, points to characteristic features of the two Russian

expeditions: the fact that the duration of the famous sea voyages in the North Pacific Ocean was much shorter than the time spent in transit through Siberia and on preparations for the sailing. The sea voyages could begin only when vessels had been built on the eastern coast of Siberia. The paper gives special attention to the relations between the expedition members, local Russians in Siberia, and the indigenous local population.

Lawrence J. Baack's contribution analyses how the Arabian Journey was transformed from the initial strong focus on biblical philology to an emphasis on the natural sciences, cartography, cultural geography, epigraphy and archaeology: This shift took place in parallel with a change of the expedition from being an essentially Euro-centric project to a project with interest in the sciences and the Middle East in their own right. The personalities of the three principal investigators had a major part in this change, and the paper explores the roles played by the participants, the contrasting character of their encounters with Middle Eastern peoples and cultures, and the varied robustness of the disciplines they pursued in the field. Thus the priorities and practices of the expedition changed as the expedition proceeded through the countries of the Middle East, and more and more of its members died.

Jonathan M. Hess summarizes in his contribution the previous research about Johann David Michaelis, who promoted the Arabian Journey to provide secular knowledge about the natural world and culture of the Near East to bear on understanding of the Scriptures. The paper reviews Michaelis's vision of Oriental scholarship, his interventions in the debates on Jewish emancipation and the anti-Semitism that Michaelis expressed in this context. The new results in the paper involve analyses of the motivations beyond Michaelis's interventions in the debate over Jewish emancipation and the specific role of the Niebuhr-expedition in this context. It is shown how the relationship between Michaelis and Niebuhr can throw light on the relationship between Judaism, Christianity and a modern European political order. The goal of this exercise is not to locate in Michaelis a kind of

nineteenth-century scientific racism, but to show that the relationship between Michaelis and Niebuhr enables us to reconstruct how knowledge of the ancient Near East could become political in an eighteenth century concept and how this is reflected in later periods.

Michael Harbsmeier's contribution looks at Niebuhr's method in doing field work from three different angels of comparison: the originality of Niebuhr's approach is established by comparison with some of his predecessors. Niebuhr's own understanding of his method is illustrated by his critical portrayal of other travellers which he met in the field. Finally the paper analyses how later scholars have praised and evaluated Niebuhr's contributions to scholarship. These analyses conclude with a discussion of how the role of fieldwork has been underestimated and even silenced in many histories of scholarship and science.

Philippe Provençal's contribution discusses the gathering of local names and designations for plants and animals by Peter Forsskål, the appointed naturalist of the Danish expedition. It concludes that Forsskål's notes represent a pioneer work of considerable academic value. The philological difficulties, methods and implications of Forsskål's material are discussed. During field work involving the gathering of local names, the researcher may encounter a number of difficulties. These include both doubts about the identity of the species in question and linguistic imprecision. The researcher may be unable to differentiate or recognise the different linguistic features of the provided names or designations, or may not be able to understand precisely what the informant means. Even when the spelling of the collected species name is controlled by the informant, spelling mistakes may occur. These difficulties are illustrated through six examples, gathered from Forsskål's philological material and Provençal's own field research along the Red Sea.

Roger Guichard points out that the long stay of the scholars of the *Arabian Journey* in Egypt was unplanned and many academic tasks which the members of the expedition managed to carry out there were not mentioned in the otherwise painstakingly detailed instructions written by Michaelis. Thus free to follow his own interests in Egypt, Niebuhr was able to approach the country with an open mind and in so doing made early contributions to Egyptology, mapped Cairo and the Nile Delta and left a detailed account of many characteristic features of the country. The paper points out that Egypt for many previous scholarly visitors had been little more than the great drama of Israel in Egypt, an important part of the Old Testament. Niebuhr looked at Egypt with an open mind and saw an age-old civilization with a much longer and richer history than the Biblical story. Niebuhr's interest in Egyptian antiquities, not least the hieroglyphs, made an outstanding contribution to the nascent discipline of Egyptology. 42

Michel-Pierre Detalle and Renaud Detalle review Carsten Niebuhr's relations with the French Académie des Inscriptions et Belles-Lettres to which he in 1768 sent a memorandum with his responses to questions submitted to the Danish expedition to Arabia by the French Academy. Due to subsequent theft of the document it was forgotten until the authors rediscovered it in the French Bibliothèque nationale in 2001. Some of the contents of the memorandum are described together with

42. The editors fully agree with this very positive evaluation of Niebuhr's contribution to the early phases of Egyptology, not least Niebuhr understanding of the significance of the hieroglyphs before the discovery of the Rosetta Stone by Napoleon's scholars in 1799 and the importance of representing them correctly, as he later also did with the cuneiform script in Persepolis. Yet, is seems relevant here to point out a few other pioneers of scientific Egyptology, notably Benoît de Maillet, who was French consul in Cairo 1693-1720 and provided material for Description de l'Égypte, a large volume touching upon many aspects of ancient and contemporary Egypt, thoroughly, but poorly edited by the abbot Jean Baptiste Le Mascrier, whom Mallet used to edit his texts (Maillet 1735), the French Jesuit Claude Siccard, who lived and travelled widely in Egypt 1712-1726 and produced the earliest known map of the country, the above mentioned Frederik Louis Norden, Danish traveller and careful observer of ancient Egyptian monuments in Egypt and Nubia 1737-1738 (Norden 1755), and Richard Pococke, English prelate who travelled widely in the Middle East 1737-1741 and wrote an account of his visit to Egypt, including a journey up the Nile as far as Philae at the same time as Norden's (Pococke 1743).

the circumstances associated with its reception, nearly coinciding with a visit by King Christian VII to the French Academy.

Anne Haslund Hansen's contribution analyses the characteristics of the visual documentation from the Arabian Journey and the published illustrations in Niebuhr's own publications, the Beschreibung von Arabien and the Reisebeschreibung, with regard to motifs and distribution of the plates within the published works. She demonstrates that the total assembly of published images does not correspond with the Royal instructions. The early death of the expedition's draughtsman meant that Niebuhr had to take over as the artist of the expedition, a task he was capable of doing, at least to some extent, but not trained for. However, changes to the initial plans also occurred because new opportunities presented themselves during the expedition. She also analyses to what extent the illustrations agree with the presupposed ideas of the period about illustrations of travelogues in general and presupposed ideas of the Orient in particular.

Catharina Raudvere's contribution analyses the works of the Swedish travelling scholar Jacob Jonas Björnståhl (1731-1779) who started his more than twelve-year long journey as a tutor to two young aristocrats on their Grand Tour. Björnståhl continued alone to Constantinople and never returned. His letters from the long journey were published in Stockholm continuously during the journey (and afterwards in six volumes), skilfully presenting his observations in a popular form that partly financed his travels. From Constantinople he reported on linguistic, ethnographic and topographic observations and on the religious diversity. His comparative method is a result of his background in the Linnaean environment at Uppsala University, but is also a strategy to reach his audience of armchair travellers. The paper examines Björnståhl's texts as a continuation of earlier Swedish interests in the Orient and pioneer work with a more systematic academic approach to the languages and culture of the Muslim world. Both the Danish expedition to Arabia Felix and Björnståhl's stay in Constantinople provided material for future Scandinavian research in the Middle East.

Ib Friis' contribution calls attention to the contrast between the Muslim Yemen on the Arabian Peninsula and the Christian highlands of Abyssinia in Africa on the other side of the Red Sea. He compares three travellers in Abyssinia during the second half of the eighteenth and first half of the nineteenth century. The eccentric Scottish laird, James Bruce, made out of curiosity and to win a name observations of Abyssinian geography, culture and natural history on his travels in 1768-1772. The English artist Henry Salt, secretary to a British peer of the realm, visited Abyssinia in 1805 and 1809-1810, making scholarly observations while on missions to establish diplomatic links between Abyssinia and Britain. Eduard Rüppell, German naturalist traveller, collected specimens of natural history and artefacts in the Abyssinian highlands in 1832-1833 for the Senckenbergische Naturforschende Gesellschaft in Frankfurt am Main. All three travellers interacted with local people from many strata in Abyssinian society, from the ruling classes to traders, soldiers and peasants; they followed approximately identical routes and collected approximately the same information and the same kinds of objects. They all wrote travelogues for the general reader, and the later travellers commented on their predecessors. Yet their attitudes to country and people were notably different. Although all three had positive ideas about the Abyssinian civilisation, only Salt and Rüppell had political visions for its future.

Charles W. J. Withers examines the travel writings of the British Arabian traveller and hydrographer James Wellsted, notably his two volumes of *Travels in Arabia* (1838). Wellsted's Arabian land-travels were undertaken between 1829 and 1837 as part of coastal navigation work and provided important information, especially about pre-Islamic epigraphy and archaeology, and about the economy and cultures of the Arabian peoples. Wellsted's expertise was endorsed by the presentation of his work to the Royal Geographical Society, but his reputation was mediated by his publisher, John Murray, who, for reasons of audience interest, published the findings of Wellsted's land travel as volume one of the *Travels in Arabia* and the scientific coastal work in volume two. By re-order-

ing Wellsted's narrative, Murray materially altered the chronology and purpose of Wellsted's work. In assessing the "truth" of travel narratives, we need to pay attention to the history of the books themselves and the role of publishers in creating audience demand for travel narratives.

Harry Liebersohn's paper deals with a subject far from the Middle East, but certainly germane to analysis of encounters between European and local culture. Liebersohn describes and discusses the meeting in Hawaii in the 1820es between American Protestant missionaries and the well developed indigenous Hawaiian culture which had integrated traditional social structure and religion with an elaborate tradition for singing and dancing, the hula. Lieberson points out the contrast between traditional Hawaiian culture and the puritanism of the American missionaries, illustrated by William Ellis's Narrative of a Tour Through Hawaii, or, Owhyhee (1826). Ellis gave a generally sympathetic description of hula-performances, while other missionaries referred to it as an evil Hawaiian practice. Later, the hymns of the missions blended perfectly with traditional Hawaiian music to form a unique and lively Hawaiian musical tradition that has survived until today.

A final paper by Ib Friis has analysed a subject raised in discussions during and after the symposium: how valid is Carsten Niebuhr's published and unpublished criticism of James Bruce's *Travels*? After the publication of Bruce's *Travels* in 1790, Carsten Niebuhr was one of the first to discuss on a scientific basis the objectivity of Bruce's reports from his voyages in Egypt and on the Red Sea, a debate which later involved other travellers dealt with at the symposium, including George Annesley, Henry Salt and James Wellsted. Written in German, Niebuhr's contribution to this debate has been overlooked in the literature in English on Bruce's travels.

Apart from the papers represented by contributions to this volume, the participants in the symposium also had the privilege of hearing presentations from: Sverker Sörlin, Professor of environmental history at KTH - the Royal Institute of Technology - in Stockholm, Sweden (about Lutheran cameralism and the relation between religion and the Linnaean travel project). Dieter Lohmeier, former Director of the *Schleswig-Holsteinische Landesbibliothek* (Regional Library of Schleswig-Holstein) in Kiel (on a newly found *Stammbuch*, also known as an *Album Amicoru*m, which Niebuhr brought with him on his travels and in which he collected autographed greetings from people he met on the *Arabian Journey*)⁴³ and Neil Safier, Associate Professor of history at the University of British Columbia, Vancouver, Canada (on observing and collecting during a Luso-Brazilian Philosophical Voyage to Amazonia in 1783-1792).

A conclusion drawn by several of the papers in this symposium is that, in spite of careful preparations, elaborate *apodemics* and detailed instructions given to the travellers, many of the most surprising, innovating or lasting results of the expeditions were achieved either due to casual events or in cases where the travellers, not least Niebuhr, did not strictly follow the research plans outlined for them, but, stimulated by open-mindedness to other cultures, improvised and grasped unpredicted opportunities for research that offered themselves during the journey. Both careful planning and extensive flexibility have been major reasons for the success of the *Arabian Journey*.

We are now ready to turn to the sequence of printed contributions, but before doing so it remains for the Organising and Editorial Committees gratefully to thank all that have helped with the symposium and bringing this volume together. We are most obliged to Her Majesty Queen Margrethe II and Prince Henrik's Foundation for a grant in support of the symposium. We are much indebted to the Royal Danish Academy of Sciences and Letters for housing us in their splendid rooms, supporting practicalities of the symposium with a grant from the Aksel Touborg-Jensen Foundation, and for publishing these proceedings in a fitting way. We are also much indebted to the Department of Cross Cultural and Regional Studies of the University

^{43.} See also Lohmeier and Rasmussen (2010). Carsten Niebuhr's *Stammbuch* is now accessible in a digital facsimile on: http://www.kb.dk/da/nb/materialer/haandskrifter/HA/e-mss/acc-2010_20.html

of Copenhagen and its then head, Ingolf Thuesen, for help with organising and funding our symposium. We wish to thank Ph.D. Brian Arly Jacobsen, the Department of Cross Cultural and Regional Studies, for his energetic and competent work with the organisation of the symposium, taking care of the grants and the programme, having contact with the invited speakers and managing the early phases of the work with the proceedings. Lawrence J. Baack has kindly advised on a number of points and read and commented on several of the manuscripts. Two anonymous referees are thanked for their willingness to read and comment positively and constructively on the manuscripts. And last of all we wish to express our gratitude to all the participants in the symposium for having accepted our invitation to come to Copenhagen to take part in the presentations and discussions and for contributing their papers to this volume of proceedings.

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Arts and Sciences of Travel, 1574-1762: The Arabian Journey and Michaelis's *Fragen* in Context

Daniel Carey¹

Abstract

The practice of eighteenth-century scientific travel emerged out of a series of traditions that developed over the course of the previous two hundred years. During this period an extensive literature of instruction and advice also appeared, beginning in the sixteenth century with the Humanist intervention to reform travel in the 1570s, together with the instructions issued by trading companies for a variety of voyages. Efforts to control travel and give it observational coherence took on a new impetus under the auspices of the Royal Society in the 1660s as it formulated inquiries for different countries and supplied more general advice on what to observe for travellers and mariners. Viewed from this perspective, the extensive guidelines and questions devised by Johann David Michaelis and his colleagues for the Arabiske Rejse represent the culmination and synthesis of long standing attempts to make travel productive of new knowledge. This essay describes the traditions that informed these contributions and some of the difficulties associated with trying to control travel – including the utopianism of questionnaires, the practical limits of obtaining answers, and the creation of networks to distribute and respond to them.

Eighteenth-century scientific travel – of which the Arabian expedition of Carsten Niebuhr and his colleagues is such a remarkable, though still neglected example – emerged out of traditions that took shape over the course of the previous two hundred years. One of the defining features of the Arabian journey was the amount of instructional literature that accompanied it. The practice of formulating directions and questions for travellers developed historically over the same two centuries. The rise of a secular mode of

travel, governed by related interests of acquiring political information, documenting nature, and enhancing civility, was accompanied by a growing body of advice. One strand of this literature of guidance, known as the *ars apodemica* or art of travel, has received considerable attention – the work directed to regulating Continental travel, which began with Humanist interventions in the 1570s.² Various authorities, from Theodor Zwinger to Justus Lipsius, Philip Sidney, and Francis Bacon, contributed essays, treatises, orations, and letters designed to remind travellers both of their moral duties and the objective of acquiring information valuable to themselves and the state during their expeditions. A second strand of contempo-

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^{2.} Stagl (1979, 1995, 2002); Rubiés (1996; 2007); Carey (2007), pp. 65-77; Warnecke (1995); Doiron (1995); Howard (1914).

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Fig. 1. Johann David Michaelis (1717–1791). Engraved portrait, produced in 1790 by Johann Gotfried Schmidt after a painting from 1761 by the Danish-German portrait painter Johann Georg Ziesenis, approximately when Michaelis worked on the *Fragen* ... Print in Österreichische Nationalbibliothek, Port. 00150381_01. Reproduced by permission of the Österreichische Nationalbibliothek.

rary guidance has received less attention; it appeared in association with larger scale expeditions beyond Europe, undertaken in the interests of trade, exploration, and colonial settlement during the period. As they increased in number and ambition, such journeys (often made in conjunction with the enterprises of the great trading companies, like the Muscovy Company, the Levant Company, or the East India Company), required their own instructions and directions to maximize the benefits, address the risks, and ensure appropriate behaviour by the participants. Although relatively little attention has been paid to the latter form of advice, it represents part of a shared concern to discipline travel and make it useful that surfaces again and again in the early modern period.

At the same time, there are differences of audience

and occasion in the production of these contributions that we should note, including the fact that Humanist discussions typically addressed an elite, while the "corporate" instructions of trading companies concerned collective enterprises with more substantial numbers of people on board ships. These two traditions were synthesized in the work of the Royal Society in the 1660s, harnessing travel to the cause of natural history by bringing the recommendations of a prominent group of advisers in contact with a broad collective. The group of contacts ranged from humble seamen and captains to governors and diplomatic officials taking part in near and distant voyages that offered potential insight into the natural world and information on an array of valuable commodities and resources.

The moment of the Arabiske Rejse, situated in this context, constitutes the maturing of a long established set of related approaches, which created its own distinctive synthesis. The expedition featured the work of educated gentlemen; it enjoyed state sponsorship under royal authority; national prestige was at stake; and it was complemented by elaborate forms of instruction. These include the actual guidelines for the trip itself, issued in the name of Frederik V of Denmark, who commissioned the journey, and the famous Fragen an eine Gesellschaft gelehrter Männer of Johann David Michaelis, published in 1762.3 Like all works of instruction on conduct and observation, whether they take the form of "heads" of instruction, Ramist tables, or questionnaires, these works exist, I would argue, in a somewhat separate universe from the journey in its own right, for a range of reasons. There is a utopianism of expectation that surfaces in such documents that is detached from the limitations of human understanding, time, and resources, let alone the implications of mortality visited so devastatingly on the Rejse. Nonetheless the ambition signalled by instructions, questions, and directions deserves its own attention. We should be sensitive, equally, to the different modalities and inflections of these writings, even as we recognize that they form part of a shared pattern of

^{3.} Fig. 1.

objectives in transforming travel from mere errancy and self-indulgence to a productive, reputable enterprise with prospectively transformative effects on knowledge.

The purpose of this essay is to offer a set of contexts and considerations related to the near-obsession with instructing travellers and to differentiate various traditions. The first section looks at the Humanist advice literature and the second describes the materials printed by Richard Hakluyt in the sixteenth century relating to long-range journeys outside Europe. In the third section, I turn to the Royal Society's institutional approach to preparing questionnaires. A reciprocal relationship developed over the period studied in this essay between Continental and English authorities, fostered for example by the Royal Society through various connections outside England (and facilitated by the secretary, Henry Oldenburg, among others). In the final section, I look at the Arabian Voyage and Michaelis in particular. Throughout, I will consider the range of European sources that commented on travel in order to reconstruct the background to the intervention of Michaelis and his colleagues who instructed the Arabian Voyage.

I. Humanism and the art of travel

Humanist attention to the activity of Continental travel began to take on momentum in the 1570s with a series of influential writings. Hieronymus Turler led the way in a decade crowded with contributions in his De peregrinatione (1574), dedicated to the three young Barons of Schönburg, based on his family's long history of high-level service to that noble household. Written in the form of a treatise sub-divided into nine chapters, he concluded with an exemplary description of the city of Naples (in nineteen chapters). Italian city-states as the destination of travel, necessitating a particular set of observational strategies, motivated his advice to aristocratic protégés ready to accomplish themselves with languages and other social and political skills. In 1577 (perhaps under Turler's influence), Egnatio Danti produced a table with twenty-six headings under the title "Delle osservationi de Viaggi" as part of his Le scienze matematiche ridotte in tavole, published in Bologna, again prompted by the observational requirements of Italian city-states.4 The method of structuring the organization and gathering of knowledge under discrete headings, often subdivided into numerous further branches, reached a high point in the work of Theodor Zwinger, the Basel humanist, physician, and encyclopaedist. He devoted the third and longest book of his Methodus apodemica (1577) to four major cities, Basel, Paris, Padua, and ancient Athens, as a model for how to make useful observations. Yet his exploration of travel was far more comprehensive than meeting this objective alone; where Danti had confined himself to a single page of text and Turler to relatively brief chapters, Zwinger's work covered 400 pages, in which he followed an Aristotelian four-fold account of causation. The formal cause of travel he defines, for example, in terms of different occasions such as education or diplomacy; efficient causation speaks to the means of travel, such as material conditions and requirements or modes of transportation; and final causes concern the purpose and results of travel, evident in the knowledge gained.5

The aspiration to instruct and direct travellers on their itineraries flourished in the Low Countries, Germany and Switzerland, inheriting and reshaping the *Adelsreise* toward Humanist priorities.⁶ Among the most significant works is Lipsius's 1578 letter to the nobleman Philippe de Lannoy,⁷ published in 1586 and widely disseminated through translations in English, French, and Dutch. Lipsius wrote in the form of a polite epistle, but it is notable that one of his followers, Nicolaus Vernulaeus (a Leuven professor of rhetoric),

^{4.} Danti (1577), p. 50. For a transcription and translation, see Frangenberg (1994), p. 56-58. For instructions in the 1570s for surveying Siena following the Medici conquest, which have some similarities with Danti's concerns, see Guarducci (2005), pp. 71-98.

^{5.} See Liechtenhan (1990), pp. 151-164; Neuber (1994); Molino (2006), pp. 43-67.

^{6.} On the development of the *Adelsreise* see various contributions in Babel and Paravicini (2005).

^{7.} Lipsius (1586), pp. 30-36. For a critical edition, see Lipsius (1978), pp. 197-202.

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converted the text into a series of "leges" relevant to travel and observation,8 suggesting the potential for adaptation between forms which becomes apparent in the "genre" of the ars apodemica or art of travel as a whole. The range of sources under this rubric is considerable. Some of them concentrated on moral advice, while others focused on methods of gathering and organizing information. An important instance of the latter strategy appears in Albert Meier's Methodus describendi regiones, urbes et arces (1587),9 which was devoted entirely to the identification, accumulation and organization of knowledge gathered during the journey. Emulating Ramus's use of loci, he begins with twelve "general sections" or "places of...discourse": cosmography, astronomy, geography, chorography, topography, husbandry, navigation, the political and ecclesiastical state, and finally literature, histories and chronicles.10 Thus natural historical description is very much included within the observational field of the traveller. Each section is then broken down into further subtopics of observation. For example, under husbandry the headings include the seasons, winds, healthfulness of the climate; the soil, crops, harvests, the woods (and whether they yield masts for shipbuilding); precious stones; birds, fish, "Noisome and hurtful beasts" (serpentes and viperaria), and "All other commodities of the place that are knowne, either agreeing, or not agreeing with other countries and regions, and whatsoever else that place hath, strange, new, notable, and commodious".12 It is obvious that the list overlaps in several areas (such as geography, chorography and topography) and is not particularly coherent. Nevertheless it provides a basic method of capturing and recording desirable information in a comprehensive fashion.

What Meier provides is essentially the outlines of a chorography. The chorographic tradition had of course an ancient pedigree, with a particular focus on the description of circumscribed territories, including landscape and natural resources, but it was adapted in various vernacular traditions to include antiquarian information, and description of important historical events, august families, and notable buildings. In the German-speaking world, attempts to turn this investigation into a cooperative exercise, based on recommendations on what to observe, can be traced at least as far back as Sebastian Münster in the earlier sixteenth century. Münster's approach to the challenge is particularly interesting since he recognized that a survey of the whole of Germany was beyond the capacity of any one man, so he published an appeal in 1528 for support in describing "territories, cities, towns, villages, distinguished castles and monasteries, its mountains forests, rivers, lakes and its products, as well as the characteristics and customs of its people, the noteworthy events that have happened, and the antiquities which are still found in many places".13

One text should be mentioned that has often been overlooked in this context, despite its prominence, the *Geographica generalis* of Bernhard Varenius (1650). Among Varenius's divisions of the subject of geography, he recognized what he called special or particular geography which related to every country, ¹⁴ with a further division into headings of the celestial, terrestrial and human. The celestial related to stars and

^{8.} Depuydt (1992), pp. 21-33.

^{9.} For an edition, see Rassem and Stagl (1994), pp. 160-168. Meier's work was commissioned by Heinrich Rantzau, the humanist nobleman and governor of Schleswig-Holstein under successive Danish kings from 1556 till shortly before his death in 1598 or 1599.

^{10.} Meier (1589), B1r.

II. Meier (1587), A7r (under heading VI "Georgica"); Rassem and Stagl (1994), p. 164.

^{12.} Meier (1589), pp. 10-11.

^{13.} Translated in Strauss (1959), p. 26. See Münster's Erklerung des newen Instruments der Sunnen (Oppenheim, 1528) which included Item eyn vermanung ... an alle liebhaber der Küstenn, im hilff zu thun zu warer unnd rechter beschreybung Teütscher Nation, reprinted elsewhere in 1534, 1544, 1545, 1575. For discussion of this document and Münster's methods of gleaning information from travellers and others, see McLean (2007), pp. 147-164. 14. The first to use these terms was Keckermann (1611), but as Keckermann makes clear (p. 6) he followed Ptolemy's distinction between geography and chorography. "Special" is used because it treats the world in specie (p. 163).

their motion, the distance of the country from the equator, and, although he discounted it, the particular governing (praeficiunt) astrological sign of every country. He identified ten terrestrial headings, including the limits and circumference of the territory; figure; magnitude; mountains; waters; woods and deserts; fruitfulness or barrenness (and the fruits it produces); minerals; and animals. His third heading was that of human geography. Here he mentioned another ten "affectiones" or properties: the stature of the natives (such as shape, colour, length of life, and diet); traffic and arts; "virtues, vices, genius, and learning [scholae]"; social customs in the form of burials, marriages, christenings, etc.; speech and language; the mode of government (Regimen politicum); religion and ecclesiastical government; cities and places of note; memorable histories; and the famous men, inventions, and artifice of the place. 15 In this digest Varenius covered a vast range of subjects comprehending natural, social and political history. The significance of the piece lies in its applicability to any country, which gives it a great deal in common with the far more extensive advice supplied by Zwinger, Meier, and others. Varenius presented this subject with headings but he also set out the structure in the form of a table. 16 For that matter, he could just as easily have presented the headings as questions: they serve the same function of directing and structuring the observation of travellers.

English engagement with this tradition began in the 1570s and blossomed in the seventeenth and eighteenth centuries. Several of the major early Continental works were quickly translated, including *The Traveiler of Jerome Turler* (1575) which appeared just a year after the Latin original; this text found a readership, among others, in Gabriel Harvey and Edmund Spenser. Meier's 1587 *Methodus* was translated in 1589

by Philip Jones as Certaine briefe, and speciall Instructions. Jones widened the audience considerably beyond the "homines nobiles ac docti" cited in Meier's title to include his own list consisting of Gentlemen, merchants, students, souldiers, mariners, &c. Employed in service abrode, or anie way occasioned to converse in the kingdomes, and governmentes of forren princes. In his dedication Jones mentions that his "good and learned friend, M. Richard Hakluit", had encouraged him to dedicate the translation to Sir Francis Drake. Three years later, in 1592, Sir John Stradling translated (and augmented) Lipsius's letter on travel for an English audience with a dedication to the third Earl of Bedford. 19

Of course the impact in England of Continental traditions of structuring travel advice occurred without needing to enter the English vernacular. The influence of Zwinger, whose work was not translated, is nonetheless apparent in Sir Thomas Palmer's comprehensive Essay of the Meanes how to make our Travailes into forraine countries, the more profitable and honourable (1606). Palmer included four extensive tables summarizing his text and providing a structured conception of the relationship between different types of travel. But Palmer was not the first to employ Ramist tables in this context in England. William Davison, the disgraced Secretary of State, produced a synoptic table focusing on political observation. Although the work did not appear in print until 1633, the occasion for its composition was the departure of Davison's son Francis, then enjoying the patronage of the Earl of Essex, on a Continental journey in 1595 (Francis would write, as a result, an account of Saxony).20 Robert Dallington made use of tables in two works on France and Italy published in 1605, based on his Continental travels in 1595-1600. His account of France was prefaced by a discourse on the method of travel, which shows the close relationship between the formal essay and the synoptic table. In his tables for France and Italy,

^{15.} Varenius (1650), pp. 2-5. For discussion of his work and influences, see Schuchard (2007); and Kastrop (1982), pp. 79-95.

^{16.} Varenius (1650), table at p. 9.

^{17.} Spenser gave a copy to Harvey, his Cambridge companion, who annotated it extensively. For a facsimile of Harvey's copy, see Turler (1951).

^{18.} Certaine briefe, and speciall Instructions, trans. Philip Jones (London, 1589), A3r.

^{19.} Stradling (1592).

^{20.} Davidson (1633), pp. 1-24. On Francis Davison, see Hammer (1996), p. 364 + nn.

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Dallington also allocates attention to natural history under two headings - cosmography and chorography. The former includes climate and astrological influences, while he breaks the latter down into hydrography and geography, covering lakes, rivers, and their navigability, and the provinces, commodities, and population of the territory, respectively.²¹

II. Instructions and directions for long range travel

To fill out a picture of the strategies employed in order to direct travel in late sixteenth century we need to consider attempts to regulate and inform long range journeys. Richard Hakluyt's landmark compilation promoting English trade and colonial expansion, The Principal Navigations, Voyages, Traffiques, and Discoveries of the English Nation (first edition 1589; expanded 1598-1600), provides a valuable resource.22 Among the multitude of documents included by Hakluyt, he printed a number of travel instructions. These writings indicate several things: first, that travel outside of Europe was equally subject to efforts to give it discipline, purpose, and observational coherence. Second, they demonstrate a practical emphasis on accumulating knowledge of commodities, resources, and markets, as well as trade techniques that becomes so conspicuous in the later seventeenth century. Finally, those who commissioned voyages (through small or large-scale jointstock initiatives) gave their advice to groups rather than individuals and they therefore anticipated a collective project to make observations. The rationale for such an approach resulted, to some extent, from the conditions of travel onboard ship where the party consisted of seamen, officers, and merchants, as opposed to the different circumstances facing individual noblemen or gentlemen journeying overland (albeit with occasionally extensive entourages). But it also speaks to the backing of institutions in a number of cases, whether trading companies or less formally constituted assemblages of investors, which needed to have information gathered in a different fashion through a certain amount of implicit repetition and shared effort.

The earliest work of instruction printed by Hakluyt dated from 1553 and came from Sebastian Cabot: "Ordinances, Instructions, and Advertisements" prepared for Sir Hugh Willoughby and Richard Chancellor in a mission to find the Northeast Passage (though they failed to reach their proposed destination, the journey did result in the establishment of the Muscovy Company). This wide-ranging document covers matters such as discipline on the ship and the need for courteous and gentle treatment of anyone encountered during the journey. At the same time the task of documentation was paramount:

The names of the people of every Island, are to be taken in writing, with the commodities, and incommodities of the same, their natures, qualities, and dispositions, the site of the same, and what things they are most desirous of, & what commodities they will most willingly depart with, & what metals they have in hils, mountains, streames, or rivers, in, or under the earth.²³

The ethnographic component of the investigation was largely subordinated to commercial interests, but Cabot also recommended learning the "natures and dispositions" of local people.²⁴

The importance of navigational information was also stressed. Cabot wanted a record of coastlines and tides, along with latitudes. ²⁵ Advice on a later mission in search of the Northeast Passage, this time undertaken by Arthur Pet and Charles Jackman in 1580, came from William Borough (chief pilot of the Muscovy Company from 1572). Borough, who had travelled on the 1553 expedition directed by Cabot, gave similarly detailed nautical instructions to take regular soundings, especially as the voyagers came across any

^{21.} Dallington (1605?), A2v; Dallington (1605), A2v. For discussion, see Rubiés (1996), pp. 167-170 (with reproduction of the tables); Höltgen (1984), pp. 147-177.

^{22.} I have discussed this subject at greater length in Carey (2009).

^{23.} Hakluyt (1903-1905), Vol. 2, p. 203.

^{24.} Hakluyt (1903-1905), Vol. 2, p. 202.

^{25.} Hakluyt (1903-1905), Vol. 2, p. 197.

coastlines, to note wind direction, and variations in the compass. When they sighted land they should draw a map and identify prominent features of it, any bays, harbours or river mouths, providing the latitude and longitude, the times of tides and the changing height of the water. Borough went on to suggest what they should observe on land:

But withal you may not forget to note as much as you can learne, understand or perceive of the maner of the soile, or fruitfulnesse of every place and countrey you shall come in, and of the maner, shape, attire and disposition of the people, and of the commodities they have, and what they most covet and desire of the commodities you cary with you.²⁶

Both Cabot and Borough anticipated, in effect, a reciprocal process of discovery, at least in terms of commercial needs and desires.

The most substantial instructions printed by Hakluyt came from an important source, his elder cousin, also named Richard Hakluyt, a lawyer at the Middle Temple. The elder Hakluyt offered guidance on establishing a settlement in North America (for the benefit of Sir Humphrey Gilbert and, after Gilbert's death at sea, for Martin Frobisher on his third voyage), along with two sets of instructions containing detailed recommendations for making observations on cloth and dyeing in Persia and the Ottoman Empire.27 He also made recommendations to Pet and Jackman in 1580 which share the concerns of Cabot and Borough, mentioning the importance of noting any islands they encountered (with potential for stapling or as entrepôts), surveying the soil, woods, springs, and wild beasts, and the quality of the harbours and havens. They might also locate good sources of naval stores like masts, tar and hemp.28 But the majority of this document focused on the enticing possibilities once Pet and Jackman reached Cambalu or Quinsay (Beijing or Hangzhou). Much of what he had to say re-

Further archival research would, I suspect, reveal a more consistent pattern of equipping voyages with written instructions, some governing conduct during the journey and others requesting specific data and the collection of items of interest, of which significant traces appear in Hakluyt's encompassing collection. The archives of the trading companies constitute an obvious resource to investigate further. For example, the records of the East India Company's activities in Japan include an interesting document entitled "Progress of questions and answers concerning Japon" from 1627 sent by the company's factors in Batavia.30 Earlier in the century the famed Flemish naturalist Carolus Clusius devised a plan to involve the Dutch East India Company in a related project. Recognizing the potential for travel (doubtless demonstrating his background in medical botanizing as well as a broader Humanist formation), he developed a set of in-

lated to the long list of wares they should bring with them for sale to the Chinese, but he also included recommendations on what to do and observe. Here his advice took on the character of ars apodemica essays instructing gentlemen during their tours of European capitals and city-states. The first thing to record was Chinese military power by land and sea - the size and provision of their navy, the fortification of cities, and the supply of "calivers" (muskets), powder and shot, pikes, bills and halberds, swords and horses. The list of things worth attending to included buildings and household ornaments, apparel and furniture, but these points were prompted by commercial considerations. With such information, he claimed, merchants could guess at the commodiousness of their living and also their "wants".29 For similar reasons, Pet and Jackman should take note of shops and warehouses, and what they contained; and food supplies in the form of grain, fruit trees, and fish, while remarking on their relative abundance. A Continental survey might have investigated such matters as part of an inquiry into national strength; here it yields an insight into economic resources and potential markets.

^{26.} Hakluyt (1903-1905), Vol. 3, pp. 261-262.

^{27.} Hakluyt (1903-1905), Vol. 3, pp. 249-251; Vol. 5, pp. 229-

^{243;} Vol. 7, pp. 244-250.

^{28.} Hakluyt (1903-1905), Vol. 3, p. 266.

^{29.} Hakluyt (1903-1905), Vol. 3, pp. 268, 266.

^{30.} Farrington (1991), Vol. 2, pp. 970-972.

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structions for making observations and collecting samples designed for apothecaries and surgeons travelling in service of the company after its founding in 1602. However, his efforts did not meet with success and he later complained of receiving nothing from the VOC voyages.³¹

III. The Royal Society and its influences

The widespread attempt to exert control over travel continued throughout the seventeenth century. The issue of moral deportment remained a focus of guidance for travel on the Continent, alongside familiar recommendations on what to observe. In the 1660s the Royal Society inherited and reshaped this tradition in important ways that directly influenced European practice in the period and gave a new impetus and rationale to the use of questionnaires and instructions for travel. The connection is immediate in the case of several prominent early fellows: John Evelyn, who was active in the founding period of the Society, prefaced his 1652 account of his travels in France with an essay on the art of travel.³² Robert Southwell, president of the Society from 1690-95, left a manuscript essay in this genre, "Concerning travelling" (1658), and Isaac Newton may have drawn on this in creating a notable letter of advice of his own on travel from 1669.33 As a gentlemanly elite, the constituents of the Society constituted the target audience for these works. Their collective recognition of travel as a resource for conducting natural history was indebted, in part, to their familiarity with how to structure Continental excursions in a useful manner. At the same time they extended the scope of questions and instructions beyond Europe in a way that bears reminders of materials published by Hakluyt several decades before, both in terms of strategy and content. Whether this came about by reading Hakluyt or simply indicates a convergence in techniques for controlling travel and realizing its potential is a matter of conjecture.

The Royal Society's perspective on the utility of travel received a further crucial contribution from Francis Bacon and subsequently Samuel Hartlib through the circle formed around him in the Interregnum. Bacon himself had written perhaps the best known ars apodemica essay, "Of Travel" (1626), together with one or more unpublished works of a similar kind composed in association with the Earl of Essex,34 but it is his work on the reform of knowledge the represents the key in this context. Lisa Jardine notes that Bacon's programme of natural history allows for two preliminary groupings of material accumulated through inductive observation: "the material may be arranged according to a series of questions, or particular topics devised by the investigator, which focuses attention on particularly important aspects of the subject."35 Questions and headings play a significant role in organizing natural histories, without ostensibly prejudicing knowledge in the process.

Bacon gives us the clearest insight into this in his "Parasceve, ad historiam naturalem et experimentalem" ("A Preparative to a Natural and Experimental History"), part of the Great Instauration. Here he emphasizes the "army of workers" needed to advance the project, an undertaking worthy of a king in its scale and ambition.³⁶ At the end of the short work he presents a catalogue of 130 different "Histories" covering an enormous array of subjects. Three broad divisions structure the investigation as a whole – the history of "generations", "pretergenerations" and "arts" – brought together in their "abundance and variety".³⁷ In his list of histories, Bacon includes, among many others, the history of the earth and sea, their shape

^{31.} See Ogilvie (2006), pp. 255-256, for a translation of the document. On Clusius, see Egmond (2010).

^{32.} Evelyn (1652), A5r-B12r.

^{33.} Newton to Francis Aston, 18 May 1669, in Turnbull, Hall and Tilling (1959-1977), Vol. 1, pp. 9-11. The Southwell manuscript is King's College Library, Cambridge, Keynes MS 152.

^{34.} See the editorial discussion and text of three letters composed for the fifth Earl of Rutland in Bacon (2012),

pp. 607-673, 964-972.

^{35.} Jardine (1974), p. 136.

^{36.} Bacon (2004), p. 451.

^{37.} Bacon (2004), pp. 455, 457.

and extent; geographical natural history; the history of winds, clouds, and rain; histories of trees, plants, and shrubs, of fish, birds, quadrupeds, and serpents. A series of histories related to human beings then follows, some of which are physical, others psychological, and others still relate to trades and human practices (or arts). Thus he mentions human shape, stature, appearance, and how they vary according to race and climate; physiognomy; the faculties, humours, emotions, body types, nutrition, music, drugs, and medicine; dyeing, wool manufacture, and goods made from silk; pottery, wickerwork, gardening, and military matters.³⁸ The copiousness of the undertaking is certainly not in doubt.

Bacon presents these histories not in a dichotomous structure defining relationships in advance (in the manner of Ramus) but essentially as a series of heads or titles. He also emphasizes that questions can be put to good use in this investigation, although they should concern facts rather than causes.³⁹ Questions have the valuable function of provoking and encouraging further inquiry. For example, in relation to the history of the earth and sea, the question can be asked whether the Caspian has tides and whether a southern continent exists (terra australis) or only islands. The influence of Bacon's legal training is also apparent. Before listing his proposed histories, he indicates that he intends to supplement them with particular questions to provide instruction in what to investigate and record: "These questions are like a kind of particular Topics; for (taking my cue from civil suits) I mean, in this Great Action or Trial... to cross-examine by articles the arts and nature itself."40 The reference to topics reminds us of the organization of knowledge into headings or loci communes, while the technique of cross-examination draws on legal practice.

Bacon's technique had a direct influence on Samuel Hartlib and also on Robert Boyle whose "General

Heads for a *Natural History of a Countrey*, Great or small" (1666) became the leading publication used by the Royal Society in directing travel. The case of Hartlib is significant, in ways that have not been appreciated, because he published "An Interrogatory Relating more particularly to the Husbandry and Natural History of Ireland" in 1652 as part of Samuel Hartlib His Legacie,41 which directly influenced Boyle. The "Interrogatory" was frequently detached and circulated separately,42 and Hartlib supplied Boyle with 20 copies of it when Boyle was visiting Ireland in 1654.43 This questionnaire (the work of a Dutch physician, Arnold Boate), consisted of 362 alphabetical entries on natural history, commodities, and trade, with queries attached to each. The focus on documentation, evident in the wish to determine whether different animals, birds, or trees exist in Ireland, complements the governing concern with establishing the country's natural resources, including food stuffs, methods of animal husbandry and agriculture, as well as trades and manufactures of different kinds. Basic surveying of land with arable potential, rivers, and shores supports the plan of assessing Ireland's suitability for commercial and agricultural development in the context of the Cromwellian reconquest.

Soon after its foundation, the Royal Society demonstrated an institutional interest in developing questionnaires on diverse locations together with more general advice, which they circulated in print and through a wide network of personal and institutional contacts. The methodological attraction of inquiries clearly resulted from Bacon's impact on their research programme, but arguably Hartlib's influence was also significant in this context. If these connections strike us immediately, the Humanist background of advice on travel and chorography was equally important. At the same time, the content of the inquiries for specific territories and their focus on destinations associated

^{38.} Bacon (2004), p. 485.

^{39.} Bacon (2004), p. 469.

^{40.} Bacon (2004), p. 473. See the useful discussion of inquiries and the law in Martin (1992), pp. 165-166.

^{41.} Hartlib (1652), R1r-V1r.

^{42.} See Coughlan (1994), pp. 298-317.

^{43.} Hartlib also provided Boyle with additional inquiries of his own he hoped he would answer. Boyle (2001), Vol. 1, pp. 169, 179-80.

with English trading and colonial interests continues a tradition that appears in the instructions printed by Hakluyt.

At a meeting of 6 February 1661, the Society established a committee assigned to devise "proper questions to be inquired of in the remotest parts of the world", featuring a number of key figures from the early life of the organization, including Viscount Brouncker, Sir Robert Moray, Robert Boyle, John Wilkins, John Evelyn, and Henry Oldenburg.44 In due course, the Society produced sets of questions for Turkey, Egypt, and Persia in the Near East; Poland, Hungary, and Transylvania in Europe; for Surat and the East Indies, covering territory from South to East Asia; for Guinea - the only in sub-Saharan country to be included; and for the New World, represented by questions for the Caribbean and two sets of pairs -Virginia and Bermuda, and Guiana and Brazil; finally, Greenland and Iceland were the subject of separate inquiries. 45 After the *Philosophical Transactions* began publication in 1665, Oldenburg communicated the results to a wider public. At the same time, the Society developed directions specifically for mariners, continuing a tradition apparent in Hakluyt. Laurence Rooke's "Directions for Sea-men, bound for far Voyages" appeared in the *Philosophical Transactions* in 1666.⁴⁶ The plan was to enlist captains and pilots in the task of systematic observation, with institutional backing from the Admiralty (returning mariners were asked to deposit a fair copy of their findings with the Lord High Admiral, the Duke of York, and another at Trinity House where fellows of the Society could consult them). The "Directions" express the same need for reliable nautical information sought by Hakluyt: the variation of the compass, the ebb and flow of tides, especially near river mouths and promontories; and the direction of currents. They asked for maps of coasts and ports, soundings of depths along shorelines, notes on the sea bottom, and winds, but also for experimental samples of sea water taken in different latitudes. Robert Hooke's instruments for taking soundings and for collecting sea-water at depth appeared as an appendix to this work in the subsequent number of the *Philosophical Transactions*.⁴⁷ In a later number of the journal Henry Oldenburg printed expanded "Directions for Observations and Experiments to be made by Masters of Ships, Pilots, and other fit persons in their Sea-Voyages".⁴⁸

The Royal Society also recognized the need for more general advice on what to observe in the midst of travel, and Robert Boyle was prevailed upon to supply "General Heads for a *Natural History of a Countrey*, Great or small", a four-page piece published in the eleventh number of the *Philosophical Transactions* in 1666.⁴⁹ Boyle's important document, which was tirelessly circulated by Henry Oldenburg (along with copies of inquiries for specific destinations),⁵⁰ is perhaps the best known single text in this tradition. A version of the work, together with the Royal Society's inquiries for specific countries and regions, appeared after Boyle's death as *General Heads for the Natural History of a Country, Great or Small* (London, 1692).⁵¹

These different contributions represented a collective scheme to enlist travel into the project of natural history. The come in different forms, identified either as "inquiries", "heads" or "directions", with their own

^{44.} See Hunter (2007).

^{45.} For these and other discussions of inquiries, see Birch (1756-1757), Vol. 1, pp. 68, 69, 79, 119, 130, 144, 165-166, 180, 192, 199, 297-298, 318-319.

^{46.} Rooke (1665/6). They were prepared in January 1662 (Deacon (1997), p. 75).

^{47. &}quot;An Appendix to the Directions for Seamen, bound for far Voyages", *Phil. Trans.* 1/9 (1665/6), pp. 147-149.

^{48.} *Phil. Trans.* 2/24 (1667), pp. 433-448. This document added new instructions for use of a hydrometer. On this work, Rooke's "Directions", and the Society's circulation of directions to seamen and others, see Deacon (1997), pp. 75-86. 49. Boyle (1666).

^{50.} See, e.g., Oldenburg (1965-1986), Vol. 3, pp. 58, 87, 207, 243, 276-277, 340-341, 526; Vol. 4, pp. 133, 166-167; Vol. 5, pp. 315, 440. Oldenburg apparently regarded Boyle's "General Heads" as a collaborative piece since he produced a restructured version of the document (printed as an appendix in Hunter (2007), pp. 22-23).

^{51.} This volume may have been compiled by Denis Papin. See the editorial discussion in Boyle (1999-2000), Vol. 5, pp. xli-xly.

preoccupations, method, and morphology, but they should be seen ultimately as complementary approaches geared around loci of travel and available resources (such as the Admiralty, the trading companies, and ties to individuals embarking on journeys).

Several points are worth making about these different contributions. The inquiries for particular countries and territories have a decidedly miscellaneous character, frequently requesting information on incidental points relevant to specific countries or territories derived from the reading of travel books and other printed sources. They focus often on trades, manufactures, and commodities, as well as curiosities of nature. While they exhibit certain recurring interests they cannot be described as systematic. Robert Hooke's inquiries for Greenland constitutes an exception in approaching the task in a way that resembles a chorography in its completeness, and it is perhaps significant in this respect that the territory in question is bounded and therefore lent itself to such an analysis. Boyle's "General Heads" was often distributed together with the inquiries for specific destinations, or otherwise mentioned as a companion piece. This indicates an impulse to gather information in an inclusive fashion and to equip travellers in making observations covering a range of headings suitable for any country they encountered; but it also suggests that these were continuous efforts. Boyle's text links together the traditions I have described by drawing on Varenius and the Humanist use of topics, while also showing traces of the influence of Hartlib's more specific concerns in Ireland.

The Society's inquiries for Egypt are of particular interest in setting a context for Michaelis's intervention a century later. The development and distribution of these inquiries was hastened by receipt of a request from the linguist and scholar Hiob Ludolf, writing on behalf of the Ernest I, Duke of Saxe-Gotha, who had a member of his household travelling to Egypt and Ethiopia and who solicited the Society's questions about the country.⁵² Although he was not named, this individual is certainly Johann Michael

Wansleben, whose journey as far as Cairo commenced in 1663, although it is not clear if he received the questions before his departure in June.⁵³ Boyle and Thomas Henshaw were asked to respond to the request for questions, and Henshaw seems to have come prepared, "having been already desired to think upon this matter".54 Fifteen inquiries for Egypt are recorded in the minutes. As a whole they testify to a considerable level of curiosity on different subjects, but they nonetheless appear relatively random in sequence and significance. In terms of sources, they suggest the influence of Henshaw's reading of Pierre Belon and Diodorus Siculus at some stages. Among the more straightforward requests are for information on rainwater and nitre, together with somewhat more specific natural historical matters such as whether the female palm tree is only fruitful next to male palm trees and whether the earth near the Nile

^{53.} Collet (2007), p. 139n. Wansleben had been resident in London, after arranging for the publication of Ludolf's *Lexicon Aethiopico-Latinum* (1661). Following his entrance into the Dominican order he came to France in 1670 in a successful search for patronage from Colbert; his *Relatione dello Stato presente dell'Egitto* (Paris, 1671) was reviewed in the *Phil. Trans*. 6/71 (1671), pp. 2160-2162.

^{54.} Birch (1756-1757), Vol. 1, p. 297. Collet (2007), p. 139n, maintains that not Thomas Henshaw but his brother Nathaniel (also a fellow of the Society) was the author of the questionnaire on the basis of the copy in the Royal Society's Classified Papers (CP XIX Nr. 8) which indicates "N. Henshaw". However, the minutes assign the document to "Mr. Henshaw" and there are reasons for identifying this as Thomas Henshaw specifically. The minutes distinguish consistently between Mr. and Dr. Henshaw. Nathaniel earned his MD at Leiden, while Thomas trained in law, indicating that the latter is being referred to in connection with the Egyptian inquiries. See Birch (1756-1757), Vol. 1, p. 240, where their first names and Nathaniel's medical degree are noted. The inquiries for Egypt ask about the nitre sold there and its relationship to "our common saltpeter" (Birch (1756-1757), Vol. 1, p. 297). Thomas Henshaw wrote "The History of the Making of Salt-Peter", included in Sprat (1667), pp. 260-276 (followed by his "History of Making Gun-Powder" (pp. 277-283)). In his discussion of saltpeter, Henshaw refers to Belon's travels in Egypt and his report on it, and he remarks that "I have often enquired amongst our London Drugsters for Egyptian Nitre" (pp. 260, 261).

^{52.} Birch (1756-1757), Vol. 1, p. 297.

grows heavier as the river "increases". Other inquiries shade into the area of productive practices and potential commodities, with questions about drugs in common use that are unavailable in Europe; the existence of wooden locks that are as tough as iron; yellow amber (from Belon and Diodorus); and information on a tree said to produce a wool softer than silk. In relation to human health, he asks whether no one dies of the plague once the river floods and whether children born at eight months survive. The crocodile is a subject of particular fascination, with questions about whether Arabs can charm it; whether crocodiles of 30 feet in length grow from an egg no bigger than a turkey's, and if it is true that the ichneumon or water rat can kill a crocodile by skipping into his mouth and gnawing his way out "as old writers affirm". The editorial perspective is apparent in the question of whether the appearance of men's arms and legs out of the ground on Good Friday at a place five miles from Cairo continues "and how that imposture is performed".55

The Society's method of producing inquiries had impact in Europe as its approach and institutional profile became known. This is evident at an early point in its history, as we have just seen with the Duke of Saxe-Gotha, and it also appears in the exchange between Oldenburg and Melchisédech Thévenot, the important French travel editor and convener of a circle known as the Montmor Academy in Paris in its final years (1663-65). Thévenot had been in correspondence with Oldenburg in 1661, and the group he led devised a scheme to supply voyagers with "Mémoires" directing them to make useful observations.⁵⁶ Elsewhere, Martin Fogelius, a Hamburg professor of logic and metaphysics, also corresponded with Oldenburg on this subject. Fogelius provided Friderich Martens, a barber-surgeon who took part in a whaling expedition in 1671, with a translation of the Society's inquiries for Greenland (composed by Robert Hooke and published in the *Philosophical Transactions* in 1667), to which he added his own questions, which informed Martens's highly successful *Spitzbergische oder Groenlandische Reise Beschreibung* (1675). Fogelius wrote to Oldenburg on 31 January 1671/2: "I have by me a relation of Greenland, as they call it, described in German by a surgeon, in which all the plants, animals, varieties of snow, etc. are curiously depicted in a lifelike way. He also answers many of the headings which your Society proposes for the consideration of travelers. I did not wish him to write anything beyond what he had ascertained very exactly." ⁵⁷⁷

IV. Michaelis and the Arabian Voyage of 1761-1767

From the account I have provided it is clear that efforts to control travel and to exploit its potential in advancing knowledge had occurred in various quarters across the sixteenth and seventeenth centuries, through the initiatives, among others, of trading companies and learned societies, sometimes rooted in practical and commercial interests and sometimes guided by Humanist principles. This pattern continued in the eighteenth century on an expanded scale. One of the most notable contributions in the period prior to Michaelis was made by Gerhard Friedrich Müller in connection with the Second Kamchatka Expedition (1733-43), sponsored by the Russian Academy of Sciences. In 1740, Müller prepared a remarkable document containing 1,228 questions under six separate headings. The likelihood that Michaelis was aware of this project is increased by the fact that he corresponded with Müller (four of Müller's letters to him survive). Müller's letter of 18 October 1762 from

^{55.} Birch (1756-1757), Vol. 1, pp. 297-299.
56. See the "Project de la Compagnie des Sciences et des Arts". A copy is printed in Huygens (1891), Vol. 4, pp. 325-329. For discussion, see Dew (2006), pp. 39-59, esp. pp. 46-49. On Thévenot's no longer extant correspondence with Oldenburg from 1661, see Oldenburg (1965-1986), Vol. 1, p. 399n.

^{57.} Oldenburg (1965-1986), Vol. 8, p. 516. Martens noted that Fogelius helped him with further inquiries of his own, while arranging the work into order and identifying various plants; see Martens ([1675] 2002), pp. 19-20. Robert Hooke alluded to Fogelius's use of his inquiries in the preface to Knox's *Historical Relation* (Knox 1681), sig. (a)3r.

St. Petersburg anticipated the arrival of Michaelis's *Fragen* and their usefulness.⁵⁸

Viewed from this perspective, the extensive instructional materials that accompanied the *Arabian Voyage* suggest an intriguing synthesis and maturing of traditions that had developed over the course of the two previous centuries, introducing a number of elaborations while echoing concerns that had accumulated over decades of prior practice in different contexts. Immediate inspiration may also have come from Michaelis's need to avoid the failure in 1752 associated with his Göttingen colleague, Albrecht von Haller (president of the Göttingen *Akademie der Wissenschaften*), who attempted with little success to instruct and coordinate a naturalist and collecting expedition to America.⁵⁹

The key documents associated with the Arabian voyage to consider are the Royal Instructions issued in the name of Frederik V and the lengthy *Fragen* of Michaelis (covering 350 pages in the Frankfurt octavo). These were joined by questions from the *Académie Royale des Inscriptions et Belles-Lettres*, also printed by Michaelis in his volume. ⁶⁰ We can add to this list Linnaeus's *Instructio peregrinatoris* (1759) which the Royal Instructions cited as a source of rules for the naturalist Peter Forsskål. ⁶¹ Thus the project to inform the journey was effectively a collaborative one across Europe, with Michaelis at the centre of it. ⁶²

58. The four letters from Müller to Michaelis between 1757 and 1762 are in the Niedersächsiche Staats- und Universitätsbibliothek Göttingen (G2° Cod. Ms. Mich. 326, fol. 227-230); the 1762 letter is fol. 230. On Müller see Bucher (2002). 59. Collet (2012), pp. 43-44.

60. These were also published with a separate preface in *Histoire de l'Académie Royale des Inscriptions et Belles-Lettres* 29 (1764), pp. 1-30, covering the years 1758-60. On the Académie's document and related records in its archives, see Detalle (2003).

61. Michaelis (1762), d2r-v. Linnaeus was the *praeses* and Eric Anders Nordblad the respondent. In fact, Forsskål himself (who studied with Linnaeus) had drawn the attention of Michaelis to the existence of this work in a letter of 25 September 1759 and sent him a copy for Niebuhr's use in particular. Michaelis (1794-1796), Vol. 1, p. 407.

In these contributions we see once more the integration of questions, directions, "heads" and instructions, all of which were used to achieve the goal of giving the expedition discipline and observational coherence. At the same time, the instructional interventions indicate a tension by seeking to manipulate action at a distance without acknowledging their utopian aspirations. In the case of the *Arabian Voyage*, this appears in the huge expectations placed on the travellers and their powers of investigation, ⁶³ the limitations of communicating the inquiries, and of course the implications of mortality (four of the five commissioned scientists died during the journey). ⁶⁴ Although

for questions from the learned in the Göttingische Anzeigen von gelehrten Sachen 1:16 (7 February 1760), pp. 129-131, which resulted in the reply from the Académie Royale des Inscriptions et Belles-Lettres. For other individual replies to the call for questions, see Michaelis (1794-1796), Vol. 1, pp. 419-444. Michaelis thanked these correspondents by name in the foreword to his Fragen (Michaelis (1762), b2v). The originals are in the Danish State Archives: Tyske Kancelli, Udenrigske Afdeling, Realia, Den Arabiske Rejse I-III, 1756-70, parcel 3-003, no. 86. In addition, the artist Anton Raphael Mengs wrote to Frederik Christian von Haven with questions about Egyptian architecture and related art which he hoped he might answer on the tour, although his inquiries were not included in the Royal Instructions or Michaelis's questionnaire. The letter, which survives only in von Haven's transcription (The Royal Library, Copenhagen, NKS 133,II, 236), is transcribed in full and discussed in Haslund Hansen (2012), pp. 113-117.

63. On 18 January 1763, von Haven wrote to Bernstorff's private secretary, Christian Friedrich Temler, noting the difficulties involved: "Ich kann noch nicht rechnen, dass ich den vierten Theil von dem Umfange der arabischen Sprache weiss, und man muss erst das Bekannte wissen, ehe man etwas Unbekanntes sagen kann." (I cannot even say that I know a fourth part of the circumference of the Arabic language, and you have to know the known first before you can say something about the unknown). Michaelis (1794-1796), Vol. 2, p. 92. In the same year Carsten Niebuhr sent a private letter to Temler also airing his frustrations over what the *Fragen* entailed when he received the work in Mumbai. Preserved in Berlin-Brandenburgische Akademie der Wissenschaften: Nachlaß C. Niebuhr, Nr. 28.

64. The Swedish orderly also died, a dragoon named Lars Berggren. Michaelis had doubts about von Haven's health from the start but Forsskål's demise took him by surprise.

the group departed with the Royal Instructions, those of the Académie, Prof. Christian Gottlieb Kratzenstein's contribution, and the queries of individuals who responded to Michaelis's call, Michaelis's own extensive compilation of *Fragen* only arrived in instalments, with a full set being available finally by 1763, virtually after the fact. ⁶⁵ Thus Michaelis's "questionnaire" (if that is the way to describe it) continued the phenomenon of existing in a separate textual universe, independent of the journey itself.

The Royal Instructions set out the working relationships, tasks, and protocols for the group. 66 Michaelis prepared them, with a few supplements from various Copenhagen professors and the foreign minister, J.H.E. von Bernstorff. 67 In this respect they constitute a more sophisticated form of the kind of instructional document that was evidently widely used in organizing long distance voyages by trading companies, as we saw in the case of Sebastian Cabot. Much more attention is given in the Arabian instructions to the differentiation of roles for the participants, each with individual assignments and methods of recording their observations. 68 This division of la-

Michaelis (1793), pp. 66 [recte: 69], 75.

bour in generating information occurs under disciplinary and thematic categories that largely replicate those supplied to travellers in the late sixteenth century and seventeenth centuries, for example, by Albert Meier or Bernhard Varenius; however, neither Meier nor Varenius addressed the many competences required to accumulate the necessary data or assigned different individuals' responsibility to investigate them. Of course, the *Arabian Voyage* ended up, unexpectedly, replicating this older tradition when Niebuhr inherited responsibility for the questions delegated to his deceased colleagues; as such, he occupied a position closer to that of earlier travellers armed with a series of questions on quite diverse topics, all of which required attention.

The Royal Instructions strike a familiar note by reiterating the need to keep journals;⁶⁹ this practice was a staple of instructional strategy apparent in the early literature, whether on board ship or journeying on the Continent for personal, social and professional gain. The Royal Instructions also mention in this context the need for clarity of expression in keeping these notes, in order to facilitate access to the information they contained in case the traveller should die before returning – a prophetic piece of advice.⁷⁰ Trade missions of the variety that Hakluyt recorded demonstrate the same awareness of the implications of mortality under the circumstances of long-range journeys where the information gathered before the traveller's demise remained valuable.

Comparison between the strategy set out in the Royal Instructions and the working procedures of the Royal Society suggest a number of points of convergence but also some differences of note. The Royal Instructions show greater awareness of the value of producing botanical and zoological illustrations than many previous works of this kind (a task delegated to

^{65.} I am grateful to Lawrence Baack for clarifying these complex circumstances. For a reference to the delay in receiving the instructions, see von Haven's letter to Bernstorff 18 January 1763 (Michaelis (1794-1796), Vol. 2, p. 83). 66. The original document, signed by the king and by Bernstorff, was retained by Niebuhr and is now held in the Dithmarscher Landesmusem, Meldorf, DLM 26000. 67. On the composition of the Royal Instructions see Haslund Hansen (2005), pp. 12-14. In his autobiography Michaelis claimed entire credit for them. Michaelis (1793), p. 67. For Michaelis's already extensive plans for the expedition see his letter to Bernstorff of 30 August 1756 (Michaelis (1794-1796), Vol. 1, pp. 299-324). On 21 October 1760, Bernstorff wrote to Michaelis with enclosures detailing "in extenso" various instructions and suggestions from Professors Kall, Ascanius and Deden, and Kratzenstein (Michaelis (1794-1796), Vol. 1, pp. 445-488). These are provided in Danish translation in Rasmussen (1990) with valuable notes.

^{68.} A precedent for this appears in the Second Kamchatka Expedition, which, unusually, included a group of scientific investigators: a naturalist (Johann Georg Gmelin, replaced in 1737 by Georg Wilhelm Steller); an astronomer (Louis de l'Isle

de la Croyère); and a historian (Müller, replaced in 1740 by Johann Eberhard Fischer). See Bucher (2002).

^{69.} Michaelis (1762), c6v-7r (Royal Instructions §8 and §9). 70. Michaelis (1762), c6v-7r (Royal Instruction §8). Michaelis complained of the failure to observe this advice. Michaelis (1793), p. 75.

Georg Wilhelm Baurenfeind),71 together with notes on the packing of specimens - a topic that had received consideration, for example, in John Woodward's Brief Instructions for making observations in all parts of the world (1696), presented to the Royal Society. The instructions for the Danish expedition raise an important issue identified by the Royal Society, namely the need for the multiplication of witnesses. Instruction §8 points out that confirming testimonies create greater confidence in the truth of a report.72 The same commitment is apparent in a statement by Oldenburg when he printed the "Inquiries for Suratte" in 1667. He noted that copies of the document had already been sent to India and that he had received some responses. But he purposely refrained from printing these replies "because 'tis altogether necessary, to have confirmations of the truth of these things from several hands, before they be relyed on".73 Michaelis (as the authority behind the Royal Instructions) embedded the notion of repetition in a much fuller understanding of the potential contribution made by different disciplinary points of view. Yet, while recognizing that specialists could inform one another's research, he had no expectation of or desire for uniformity and in fact regarded contradiction as a mark of historical accuracy ("historische Treue").74 The Royal Society shared with the Danish expedition an anticipated role for trading companies in effecting their plans. In 1667, Oldenburg remarked on the success of the programme to develop and distribute travel inquiries in the preface to the second volume of the Philosophical Transactions and specifically thanked the governors of the Levant and East India Company for their support.75 The Danish instructions anticipated a considerable amount of logistical help from the Danish East India Company in transporting goods and samples,76 but in fact its involvement proved minimal,

occurring only in 1764 when Niebuhr used the company to ship some materials and specimens (the decision not to base the mission out of Tranquebar played a major role in determining this modest level of participation).

The most notable departure in the Royal Instructions appears in the emphasis on issues of language. Nowhere do we find in the many questionnaires compiled by the Royal Society (or in Boyle's "General Heads") any attention to the linguistic conditions of knowledge exchange or a specific role accorded to interpreters and translators. The Arabian Voyage foregrounded this issue in a variety of ways. Frederik Christian von Haven and Forsskål were selected in part because they already knew Arabic; along with Niebuhr they were given additional time and support from the crown to improve their knowledge of the language beforehand (with Niebuhr requiring further assistance from them in his studies on board the Grønland). Such was the importance attached to this matter that the physician Christian Carl Kramer, appointed only two months prior to the departure of the expedition, had his personal duty to acquire Arabic named in Royal Instructions, again with help from his companions.77 This aspect of the Voyage arguably gives it a closer connection to the older tradition of the Continental foray where the attainment of proficiency in languages was central to the conception of the purpose of travel.

The attention to travel given by the Royal Society, reflected in its questionnaires and Boyle's "General Heads", occurred without advisors giving guidance on the moral deportment of the traveller, a major preoccupation of Humanist advice. The Royal Instructions are much closer to this tradition in a strongly worded statement in section 10 offering guidance on how to relate to Islam in the midst of the journey. The group was told to remain courteous to the inhabitants and to refrain from lodging objections against their religious faith.⁷⁸ Interestingly enough, Cabot made a

^{71.} Michaelis (1762), d4r (Royal Instruction §21).

^{72.} Michaelis (1762), c6v-7r.

^{73.} Phil. Trans. 2/23 (1666/7), p. 415.

^{74.} Michaelis (1762), c7r (Royal Instruction §8).

^{75.} Phil. Trans. 2 (1667), p. 414.

^{76.} Michaelis (1762), d3v-d4r (Royal Instruction §20).

^{77.} Michaelis (1762), d5r (Royal Instruction §24; see also Royal Instructions §3 and §4 (c5v-c6r)).

^{78.} Michaelis (1762), c7v-c8r. An Amsterdam-based individual

similarly prudential recommendation in 1553, telling his mariners not to disclose their religion to the people they met but rather to "passe over [it] in silence", and furthermore to "beare with such lawes, and rites, as the place hath, where you shall arrive".79 The advice literature on Continental travel made parallel recommendations for remaining circumspect in the face of confessional differences across Christendom. Even more striking, in terms of governing moral conduct and its connection to the ars apodemica tradition, is the stern royal instruction to avoid contact with Arab women, whether by pursuing amorous intrigues or simply taking the kind of liberties tolerated in Europe. The allegedly jealous nature of Muslim men and their tendency to exact revenge necessitated this reminder of moral duty. Interestingly, Michaelis refrained from printing this part of the instruction (its absence is indicated by an ellipsis), perhaps for fear of raising doubts about the probity of the men engaged in the mission, although it did appear in the French translation of 1763.80

Despite an energetic commitment to deploying questionnaires, the Royal Society never managed to resolve the problem of creating an obligation to respond to their inquiries (a dilemma also faced by the Hartlib circle's "Interrogatory"). The Society made attempts to use institutional resources like the Admiralty to enforce responses, but on the whole their ability to solicit answers typically came about from social connections and goodwill – a helpful but still imperfect means of achieving results. In the case of the *Arabian Voyage*, the requirement to respond, emphasized in

named de Navarre wrote to Michaelis on 20 March 1760 with inquiries and included a warning about Muslim zeal. Michaelis (1794-1796), Vol. 1, p. 432. The first-name initial is indecipherable in the surviving letter. Niedersächsiche Staats-und Universitätsbibliothek Göttingen (2° Cod. Ms. Michaelis 326, fols. 262-265). Navarre responded to a notice of Michaelis's call in the *Gazette d'Amsterdam* 6 May 1760. 79. Hakluyt (1903-1905), Vol. 2, p. 202. 80. For the part of the instruction missing in Michaelis (1762), c8r, see the French translation, Michaelis (1763), d5v-d6r. For a Danish translation of the relevant passage, see Rasmussen (1990), p. 67.

the instructions, ⁸¹ amounted to a contractual duty rather than a simply moral one. A commissioning authority had the right to impose this on its agents, as we find in the trading companies, although satisfaction was never guaranteed. Of course where the instigator was a sovereign, the demand (and motivation to address it) proved more acute. An important precedent for this exists in the Duke of Saxe-Gotha's commission of Wansleben's journey to Egypt a century before. ⁸² Likewise the Grand Duke of Tuscany posed questions regarding China for the Jesuit Johann Grueber (printed by Athanasius Kircher in 1670) to which he duly received replies. ⁸³

From the point of view of questions and instructions for travel, the centrepiece of the Arabian Voyage was Michaelis's extensive Fragen. The enormous interest of this document cannot be adequately explored here;84 my purpose is a particular one of placing it in the context of a long set of efforts from the sixteenth to the eighteenth centuries to regulate travel and maximize its impact on knowledge. Michaelis's preface to the work contains a number of intriguing comments. He begins by citing two defects (Mängel) in the practice of travel. The first is an inadequate knowledge of the language of the local country being visited, not only because geography and natural history depend on knowing the names of places and things, but because there is no way to gain insight into the mores, laws, and politics of a people without understanding their language. To reinforce his point he remarks on what would happen if one sent a German to France or England with no knowledge of the native tongue; he remarked laconically that such a person would produce "vortreffliche Gemälde von diesen Völkern" (ex-

^{81.} Michaelis (1762), dır-d2r (Royal Instructions §14 and §15). 82. Ernest I's interest had been piqued by encountering the Ethiopian Abba Gregorius through Ludolf's contact with him and invitation to visit the court. See Collet (2007), pp. 132-165. 83. "La Briefve & exacte Response du P. Jean Grubere de la Societé de Jesus, a toutes les Questions que luy a fait le Serenissime Grand Duc de Toscane", in Athanasius Kircher (1670), pp. 316-323.

^{84.} See the extensive and valuable discussion in Hübner (2002), pp. 363-401.

cellent representations of these people). ⁸⁵ Clearly Michaelis's professorial role as an exponent of Oriental languages led him to prioritize this issue, but he also signals a relationship to the linguistic emphasis apparent in the long tradition of advice on how to conduct Continental journeys. The second defect is to leave travellers to their own curiosity. In order to make travel useful, supplying them with questions is vital. Otherwise they would pass over various essential things rather than giving them due attention and therefore failing to illuminate a European savant intent on knowing something precise. Ten previous travellers might traverse the country without reporting the very thing required. ⁸⁶

In this context Michaelis's assessment of his (shared) role in framing these questions involves a significant change of relationship. He stresses the superior position of the learned originator of inquiries in a way that deserves some comment. For Michaelis, "Dieser [i.e., the learned man] hat Bücher bei der Hand, aus denen kann er vielleicht zehn data zusammen suchen, zu denen nur noch das eilfte fehlt, um die Wahrheit zu erfinden." (The learned man has books at hand, from which he can perhaps find ten facts, and only lacks the eleventh to find the truth).87 In other words, the educated and informed questioner already has a broader grasp of the terrain of knowledge (based on his reading of books) but requires some points of detail to be supplied. The traveller is thoroughly subordinated to the task of supplying this superior figure with detail in which the balance of power in knowledge terms remains undisturbed. The level of erudition and preparation apparent in Forsskål's correspondence with Michaelis prior to the

85. Michaelis (1762), a4r. In one of the earliest exchanges between Michaelis and Bernstorff about the proposed *Rejse*, Michaelis mentioned the importance of travellers having "eine so gute kenntnis des Arabischen, als in Europa und aus Büchern zu erhalten möglich ist" (to get as good a knowledge of Arabic as is possible in Europe and out of books) to make the most of the journey. Letter of 30 August 1756 (Michaelis (1794-1796), Vol. 1, p. 299).

journey rather calls this account into question, in his case at least, 88 but we should note the important point that Michaelis evidently forecloses the possibility that once the expedition had concluded the traveller would have attained a vastly greater level of insight, potentially overturning the schema supplied by existing published sources. This tension in priority is always implicit in the relationship between the producer of questions and the person delegated to answer them. Yet the questions of the Royal Society do not appear to assert the same authority as Michaelis assumes, even if the prestige of the institution and its fellows gave their questionnaires a profile that earned them attention. The hierarchical relationship established by Michaelis may reflect his novel position in providing intellectual leadership for this expedition as a university professor, in an institutional setting where hierarchy was crucial.

Part of Michaelis's confidence stems from a greater degree of coordination in the world of the learned in supplying questions, both locally and internationally. In addition to the input of the Danish savants, Prof. Christian Gottlieb Kratzenstein's connections with Bernstorff had led him to provide valuable "remarks" for the "mathematician" on the journey (Niebuhr) and the "physician" (Forsskål). § In order to sharpen his own questions, Michaelis had assembled a group of learned men in his house. § When these friends provided satisfactory answers to any of the questions he wanted to ask, he omitted the query from his list. This is significant in itself because it declares certain things to be "known" and not in need

^{86.} Michaelis (1762), a4v-a5r.

^{87.} Michaelis (1762), a5r.

^{88.} See especially letters by Forsskål of 3 December 1756 and 3 April 1757 (Michaelis (1794-1796), Vol. 1, pp. 333-347). Forsskål demanded the title of professor as a condition of his appointment in his negotiations with Bernstorff, which he was granted (a decision supported by Michaelis (1794-1796), Vol. 1, pp. 391, 398). Von Haven was also given this title, but Niebuhr refused it on the basis of his education.

^{89.} Michaelis (1762), b4r.

^{90.} Michaelis (1762), b5v. He mentions four figures who held professorial positions: Christian Wilhelm Franz Walch, Johann David Heilmann, Johann Georg Röderer, and Christian-Willhelm Büttner.

either of further investigation or repetition of observation. However, in the absence of an example from Michaelis we cannot tell what kinds of questions he eliminated on this basis.

Michaelis anticipated the possibility that his Fragen might contain errors (Fehltritte), precisely because his questions related to more than one scientific discipline and might overextend his reach. He clearly had his European audience in mind and the potential for sacrificing his reputation (either by making mistakes or asking about things that one ought to know). In his defence he adopted a more humble profile by saying that errors are simply unavoidable. As for knowing the books which might have rectified any slips before they entered the questionnaire, no one had time to read them all. Furthermore, he admitted that answers to some of his questions (presumably of a natural historical variety) would be available by consulting cabinets of curiosity assembled in Europe, but access to them was not always readily available.91 He circulated his questions openly through publication, enlisting into the project a wider constituency composed of different representatives within the learned world.

Two further points raised by Michaelis in the preface clarify our sense of how he understands the strategy behind the document. The first is bound to strike the reader his Fragen, as indeed in many other cases of extensive questionnaires: how realistic was it to expect adequate answers? Michaelis explained that the friends who assisted him expressed this very concern. They wondered whether the vast number questions he posed would exceed the capacities of five researchers on a three-year expedition; if the number of questions in the text were counted not according to the headings but by the subjects covered in each of the "articles" then they amounted to more than a thousand.92 Gaining certitude about the matters covered by them was really too much to expect, nor did previous attempts to organize responses by travellers inspire confidence in the prospects of success. In reply

Michaelis merely stated that he anticipated learning more by asking a thousand questions than he would by asking a hundred.⁹³ As for the travelling party itself, their skill made him hopeful.

The final related point he makes in connection with this issue is that his questions are intended to serve as a guide not merely for the travellers commissioned by Frederik V but for others engaged in journeys to the same territories. The questions that the five members were unable to resolve would merit the attention of future "Gelehrte[n] oder Kaufleute" (scholars or merchants).94 Fig. 2 shows evidence of one contemporary reader of the text making a digest of the questions in the flyleaf of his copy, with a view, it would seem, to following up on them. By using various networks of contacts, the intention of the Fragen was to elicit a coordinated response, one that could aspire to comprehensiveness and overcome the limitations of the specific journey that occasioned them. In this sense the document is intended to be exemplary, and its purpose in entering print recalls Hakluyt's decision to reproduce instructions for particular journeys, some of which ended in total failure, precisely because future expeditions might address the shortcomings of ealier undertakings.95

The actual questions posed by Michaelis address an array of topics, from topography to astronomy, social custom, and natural history. In this sense they embrace the diversity of subjects and scope that appears in the general advice of Varenius, Boyle, or Meier. The specificity of what Michaelis asks about, the question form itself, and the sources that prompted the questions have more in common with the Royal Society's questionnaires for different countries and territories. In particular, Michaelis indicates the reading that led to him to seek more information, a practice he shared with the Royal Society.

^{91.} Michaelis (1762), b5r.

^{92.} Michaelis (1762), b6v.

^{93.} Michaelis (1762), b7r.

^{94.} Michaelis (1762), c1r.

^{95.} See, e.g., Hakluyt (1903-1905), Vol. 7, pp. 253-254; 410-411. See also the elder Richard Hakluyt's instructions for Sir Humphrey Gilbert and Martin Frobisher, discussed in Carey (2009), pp. 174-175.

Fig. 2. Contemporary summary of Michaelis's 100 questions in Fragen an eine Gesellschaft gelehrter Männer (Frankfurt, 1762) in the end flyleaf of the copy held in the Bodleian Library, Oxford, shelfmark Vet. D5 f.204. Reproduced by permission of the Bodleian Library, Oxford.

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For example, Michaelis's seventh question asks about reports of swarms of flies described in various travel accounts of Egypt, and whether they are true or exaggerated. His sources here, as he indicates, are Pliny and Hiob Ludolf.⁹⁶ Question twenty-four asks for further attention to what modern travellers have to say about the pestilent wind called the Samum (he cites Engelbert Kaempfer, Jean Chardin, and Alexander Russell's Natural History of Aleppo (1756)).97 We have already seen that in the case of the Royal Society's inquiries for Egypt, the compiler (Henshaw) advertised his indebtedness to Pierre Belon and Diodorus Siculus in compiling his questions. In Oldenburg's prefatory remarks to a new batch of inquiries for the Antilles and Caribbean islands he stated that they were "collected out of the Relations of several Authors writing of those Islands", such as Charles de Rochefort's Histoire des Isles Antilles de l'Amérique and Richard Ligon's A True and Exact History of the Island of Barbados. Similarly, the inquiries for Surat were taken from "the Relations publisht by Purchas, Linschoten, and others".98

Of course the overwhelming interest that drove Michaelis was to illuminate Biblical history - not that this excluded attention to natural history. In fact the two were deeply intertwined. For instance, question 12 asked about the reference in the Old Testament to leprosy of house and garments (Leviticus 14:33-57) and whether this was more than a metaphor. Question 18 wanted to know if a wood existed which turned salt water to sweet, spoken of in Exodus 15:23. Elsewhere he combined ancient and modern sources. In relation to the kinds of manna in Arabia he referenced the sixteenth-century Augsburg naturalist Leonard Rauwolf who travelled in the Middle East, as well as the Mosaic description of nourishment on Arabian manna reported in Exodus.99 The Bible may have been the origin of questions but this did not preclude use of complementary accounts, either with a direct link to the territory (as in Rauwolf) or without one, such as his citation of William Hillary's Observations on the Changes of the Air and the Concomitant Epidemical Diseases, in the Island of Barbados (1759) for information on leprosy.

Although we can locate certain points of contact between Michaelis and the Royal Society's approach to asking questions, significant differences remain. The first of these is that Michaelis often indicated why he was asking a question. This might seem an obvious thing to do but should not be ignored. The Royal Society's questions (and indeed those of other questionnaires) typically neglect this side of the equation. Sometimes we can work out intuitively the reason for asking a question; in other cases one would like to know what kind of assumptions about nature prompted them, or whether the questioner asked because they either doubted or believed in the existence of something. More importantly, Michaelis often provides conjectures and hypotheses on the topics he wants investigated (in the form of essays) which do the work of explanation. In one respect this entailed a significant departure from the Royal Society's method which, following Bacon, favoured an inductive accumulation of data rather than indulgence in hypothesis. In another respect, Michaelis cast himself in a role paralleling the Baconian "Interpreter": he would integrate and pronounce on findings, while his emissaries confined themselves to a lower-order activity. He was clear that he required of them not "Vermuthungen" (conjectures) (in which scholars abounded) but rather merely "facta". TOT Whatever way the labour was divided, Michaelis's approach had the effect of turning the Bible into a kind of travel account requiring further investigation. Yet it is worth pointing out a salient difference between the Bible and travel books like those used by the Royal Society to extract their inquiries - non-confirmation of some aspect of natural history recorded in Scripture would not disqualify the text from being invested with belief.

^{96.} Michaelis (1762), pp. 15-16.

^{97.} Michaelis (1762), pp. 44-47.

^{98.} Phil. Trans. 2 (1666/7), p. 415.

^{99.} Michaelis (1762), pp. 24-25, 36, 51. On Rauwolf see, recently, Walter (2009).

^{100.} Michaelis (1762), 60-69.

^{101.} Michaelis (1762), p. 169.

The Arabian Voyage synthesized a history of prior experience in directing travel to useful ends by commissioning individuals for the journey and equipping them with instructions and questions. The maturing of a practice apparent in this enterprise appears not only in the sophistication and care with which these were developed but also in the coordination of the effort. Michaelis may have been the driving force, using his prestige to advance the enterprise, but he contributed to a composite effort and appealed to a community of like-minded scholars and learned men, equally intent on capturing the potential of travel to illuminate questions of shared interest. As Michael Legaspi has recently described him, "Michaelis was a Macher, a first-rate intellectual entrepreneur."102 The process he led was collaborative, optimistic to the point of being utopian, and like all such efforts, inevitably incomplete.

Some of these conclusions are borne out by following the afterlife of Michaelis's questionnaire once it appeared in German and in French translation. On the one hand we see the spread of networks in a way that Michaelis welcomed through the contacts of his contacts. For example, the French physician François Thiéry, with whom he corresponded, wrote to say he had made rapid inroads in distribution, sending the translation to Madrid, making it known in Paris, and anticipating circulation among consuls in the Levant. Michaelis's friend, the Scottish physician Sir John Pringle, was particularly assiduous, writing on several occasions to indicate individuals to whom he had given the work, which he curiously referred to as "Inquiries for the Danish missionaries". 104 Pringle

mentioned that he was unable to get a copy of the work to the Scottish traveller James Bruce, who was already in Egypt and on his way to Abyssinia, but he did devise some questions to provide him with. To The connection with Pringle draws attention to the importance of the Anglo-Hanoverian Personal Union as a further setting for Michaelis's activities in this context, which included his own visit to the Royal Society and Pringle's journey (in the company of Benjamin Franklin) to Göttingen. To Göttingen.

On the other hand, we also see in the exchanges a tendency of questions to breed questions, and for answers, where they were forthcoming, likewise to raise more questions. 107 Michaelis had encouraged this process from the start but it did not end with the publication of his *Fragen*. ¹⁰⁸ Posing an inquiry implied the possibility of an answer and therefore the prospect of finality on any given topic, but this was in practice difficult to attain. An inevitable disappointment came into play because the answers were either not forthcoming or failed to fulfil expectations. Pringle expressed disappointment that his own efforts to secure responses had been unavailing and later wrote to lament the delay in the publication of the "answers to your ingenious questions". 109 Niebuhr did however communicate a 20-page a response in Latin to the

For details of Pringle's distinguished medical career (he was also president of the Royal Society 1772-78) see Blair (2004). 105. Letter of 2 June 1769, in Michaelis (1794-1796), Vol. 2, pp. 223-225.

106. See Biskup (2007), pp. 140, 144-148. In 1768, Bishop

^{102.} Legaspi (2010), p. 81.

^{103.} Letter of 18 August 1763, in Michaelis (1794-1796), Vol. 2, pp. 96-97. Thiéry (who occasionally acted as physician to Rousseau) spent the period of 1759-62 in Spain. In advance of the Arabian journey, Thiéry's questions on smallpox were given to the physician Christian Carl Kramer (Royal Instruction §25). Thiéry's Observations de Physique et de Médecine, Faites en Différens Lieux de l'Espagne, 2 vols (Paris, 1791) included discussion of smallpox.

^{104.} On Pringle's contacts, see Michaelis (1794-1796), Vol. 2, pp. 212-213, 217, 223-224, 238. On his reference to the travellers as missionaries, see Michaelis (1794-1796), Vol. 2, pp. 220, 223.

Thomas Percy wrote to Michaelis asking if he could supply a gathering missing from the copy of the French translation of the *Fragen* obtained for him at the Frankfurt Book Fair by the Duchess of Northumberland. Hecht (1933), p. 3. 107. For an early attempt by Forsskål (writing from Constantinople in September 1761) to answer certain questions and Michaelis's reply in February 1762 with commentary and seeking more information, see Michaelis (1794-1796), Vol. 2, pp. 31-38; 56-60.

^{108.} See, e.g. the lengthy letter from Thiery of 18 August 1763, in Michaelis (1794-1796), Vol. 2, esp. pp. 99-112.

^{109.} Letter of 2 June 1769, in Michaelis (1794-1796), Vol. 2, p. 224; letter of 23 March 1772, in Michaelis (1794-1796), Vol. 2, p. 321.

questions of the Académie Royale des Inscriptions et Belles-Lettres in September 1768, not long after his return, which survives, although it remained unpublished.^{no} Michaelis remarked on the fate of the project in his autobiography, published in 1793 after his death, noting the difficulty caused by losing all but one of the participants in the journey. Niebuhr had done more than one could expect under the circumstances, but the fact remained that Michaelis had designed many of his questions for von Haven and Forsskål. Michaelis was forced to conclude that the demise of Niebuhr's companions had "die Frucht der Reise vermindert" (reduced the fruit of the journey). Reflecting on this setback Michaelis responded in a characteristic spirit: "Also der Nutzen meiner Fragen fiel zum Theil weg, und sie können vielleicht, fünftig von Reisenden noch besser beantwortet werden" (so the benefit of my questions partly disappeared, and they can perhaps be answered better by fifty travellers).^m For advocates of scientific travel, the remedy was to ask more questions, distribute them more widely, identify additional respondents, and insist on their giving replies.

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110. Bibliothèque Nationale de France NAF 6196. On the discussion this provoked, see Detalle (2003), pp. 4-5. For a translation of Niebuhr's response regarding religion in the Yemen, see Detalle and Detalle (2008), pp. 494-497. See also the paper by Detalle and Detalle in this volume.

111. Michaelis (1793), pp. 74, 75.

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Long Transit to the Unknown: Bering and the Siberian Context

Peter Ulf Møller

Abstract

Proceeding from a general comparison between Bering's Kamchatka Expeditions (1725-30 and 1733-43) and Niebuhr's Danish expedition, the paper attempts to identify some similarities, but also to set off the uniqueness of the two Russian expeditions. Its title points to a characteristic feature of these two expeditions: the duration of the famous voyages of discovery in the North Pacific Ocean was much shorter than the time spent in transit through Siberia and in preparations for the voyages. The sailing could begin only when seagoing vessels had been built on the eastern coast of Siberia. Exploration of the East Siberian frontier – for scholarly as well as practical purposes – was, inevitably, an important expedition task. Special attention is given to the relations between the expedition members, local Russians in Siberia, and aborigines, including mission work.

Vitus Bering (1681-1741), a Dane by birth, is famous for two expeditions, which he undertook as an officer in the Russian Navy. His employers and contemporaries called them the Kamchatka Expeditions, because the major voyages of discovery all set out from the Kamchatka Peninsula on the north-eastern coast of Asia. Scholarly literature refers to them as the First and the Second Kamchatka Expedition. They took place several decades earlier than the expedition we commemorate with the present symposium: Niebuhr's expedition to Arabia. The First Kamchatka Expedition lasted from 1725 to 1730, the Second one from 1733 to 1743. The two "forerunners" were considerably larger than Niebuhr's expedition, in terms of participants and costs. Especially the Second Kamchatka Expedition was a huge undertaking and is frequently described as the largest and most ambitious scientific expedition to have been launched in the eighteenth century. The Kamchatka Expeditions travelled mainly in Siberia, that is, on Russian soil recently incorporated as a result of the eastward expansion of the Muscovite state in the seventeenth century, whereas the Danish expedition of Niebuhr went to places far from, and completely independent of, the north European kingdom that had launched it. The Russian expeditions were ultimately bound for a part of the world that had remained unknown to European geographical science. The Danish expedition was to explore a part of the world venerated as the antique cradle of contemporary European civilization. Still, despite obvious differences, these expeditions emanated from the same intellectual climate, the same thirst for rational knowledge that was nurtured in universities, academies, and other learned institutions of eighteenth-century Europe. Furthermore, each expedition was financed and launched by a European government, for more or less explicit raisons d'État.

Much new material about the Kamchatka Expeditions (henceforth referred to as the KEs) has been published during the recent two decades, through the efforts of Wieland Hintzsche and his colleagues in

PETER ULF MØLLER SCI.DAN.H. 4 · 2

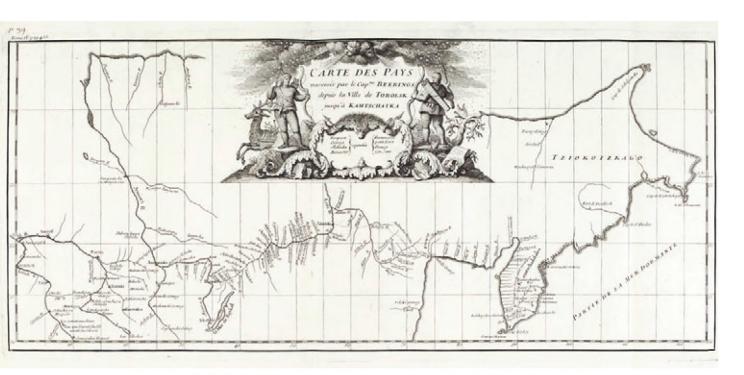


Fig. 1. Engraved map of Bering's route on the First Kamchatka Expedition 1725-1730. From Du Halde (1735) *Description* [...] de la Chine et de la Tartarie chinoise, vol. IV. Map size 23.4 x 53 cm. The Royal Library, Copenhagen.

Halle, Germany, and through the efforts of Natasha Lind and me in Copenhagen. The Halle team has focused on the German scholars that participated in the Second KE as a separate detachment from the Academy of Sciences in St. Petersburg. The Copenhagen team has focused on the navy detachments under our compatriot Bering. Our work has been generously supported by the Carlsberg Foundation. Most of the resulting publications, both by the Halle team and the Copenhagen team, have appeared in the series Quellen zur Geschichte Sibiriens und Alaskas aus russischen Archiven. The volumes in the series are published either in German or in Russian, and are brought out in cooperation between Franckesche Stiftungen in Halle and the Archives of the Russian Academy of Sciences in St. Petersburg. Recently we were also able to bring out the first complete publication of the logbook from

Trying to stay within the formulated scope of the present symposium, I intend to show that both KEs used local informants, but that these informants usually were Russians living in Siberia, rather than aborigines. In relation to the expeditions, the aborigines were mainly seen and used as a workforce. However, during the Second KE, they also became an object of scholarly study and, to some extent, a target for Christian conversion. Missionary work on Kamchatka was specifically mentioned as part of the imperial order of 1732 that launched the Second KE.³

The most illustrious part of the KEs is, of course, the sea voyages beyond Kamchatka, in search for the Bering Strait, in search for Japan, and in search for America. It was, however, a characteristic feature of

Bering's voyage through the Bering Strait during the First KE.²

I. The most recent German publication in the series is: Müller (2010). Russian volumes in the series include Ochotina-Lind and Mëller (eds.) (2009).

^{2.} Fedorova, Møller, Sedov and Urness (eds.) (2010).

^{3.} The order is published in: Ochotina-Lind and Mëller (eds.) (2001), pp. 78-79.

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both expeditions that the duration of the voyages in the Northern Pacific was much shorter than the time spent on dry land, in transit through Siberia and in preparations for the voyages. The sailing could begin only when seagoing vessels had been built on the eastern coast of Siberia. Out of the five years that the First KE lasted, the voyage of the *Holy Gabriel* to the Bering Strait and back took only seven weeks. Out of the 10 years that the Second KE lasted, the voyage of *St. Peter* and *St. Paul* to Alaska and back took less than 6 months. By far the largest portion of the expedition time was spent on *terrafirma*, in Siberia, in an extended struggle to come to terms with this vast frontier region under relatively recent Russian rule.

More or less explicitly, Siberia was part of the territory to be explored and at the same time put to use as a base camp for both KEs. The First KE set out with extremely short instructions dictated by Peter the Great on his deathbed. Basically, the expedition was to build a seagoing ship and examine if the Asian coast line north of Kamchatka was connected with America. Bering decided it was not connected, and fifty years later James Cook recognized his achievement by naming the Bering Strait after him. However, one gets a broader and better understanding of the purpose of the First KE, if one looks at the documentation submitted by Bering to the Russian Admiralty after the expedition had returned to St. Petersburg. It consisted of a short account by Bering which soon after became known in Western Europe through the French translation in the fourth volume of the Jesuit Du Halde's Description de l'empire de la Chine, printed in Paris in 1735. Bering's account is a chronological itinerary of his expedition, from St. Petersburg to what he called 'the turnaround' (in Russian, vozvrashchenie, his turning point in the Arctic Ocean, at 67° 18' northern latitude). The account has two appended schedules, "Catalogue of towns and notable places in Siberia [...], with their latitude and longitude, the latter computed from Tobolsk", and "Table showing distances in Russian versts to the towns and notable places that we passed through [...] ". Along with this material, Bering also submitted his concluding "Final Map" based on the computed distances. This map

gave the world an entirely new and much longer image of Siberia. The expedition had calculated that Siberia was thirty degrees longer than previously reckoned. Some twenty handmade copies of the map have been preserved in various libraries and archives. An engraved copy of it was printed in Du Halde's work, from where it became widely known in Western Europe.4 Bering was first of all proud to have travelled so far east. In a letter to his maternal aunt in Horsens he wrote that "I have traversed several thousand miles of Eastern Tartary [Siberia - PUM], as far as the land extended, past Kamchatka; and several hundred miles farther than can be seen from the maps [...] This journey has taken me beyond China and Japan, and no East Indian journey, whether over land or by sea, can compare with it."5 His letter does not say a word about a strait, nor about a Northeast Passage, nor about America. As far as Bering was concerned, the main result of the expedition was the mapping of Siberia in her full eastward extension.

The tables that Bering submitted along with his short account also contained brief information about which aboriginal peoples living in the different parts of Siberia that the expedition travelled through. In St. Petersburg, and in Western Europe, such information was clearly in brisk demand. Ethnographic information also appeared on copies of Bering's "final map". Four of the preserved handmade copies feature drawings of various Siberian tribes. The most famous of them is the ethnographic map from the Asch collection in the university library in Göttingen. A charming detail shows some Chukchi men in a boat near the north-eastern point of Siberia. This naïve representation of sailing Chukchis refers to Bering's most famous attempt to use local informants. The episode took place on Thursday, August 8, 1728, as the Holy Gabriel approached the strait, and is described in Mid-

^{4.} Fig. 1. This map has clearly influenced Primald's "Map of the World" from 1766; see Fig. 5 in the Introduction to this Volume.

^{5.} Bering's Danish letter was first published in Hofman (1755), pp. 247-253. Reprinted in Danish, with Russian translation, in: Ochotina-Lind and Mëller (eds.) (2001), pp. 30-35.

^{6.} Fig. 2.

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Fig. 2. Chukchi men in a boat, detail from the ethnographic version of Bering's Final Map in the Asch Collection of Niedersächsische Staats-und Universitätsbibliothek Göttingen.

shipman Chaplin's Journal. The look-out on the ship caught sight of a small craft paddling out from land, in which eight men were seated. When they had paddled up near the ship they asked where it came from, and said about themselves that they were Chukchi. When invited to come to the vessel, they for a long time did not dare to come alongside. Then they put one man on a bladder made of seal hide, and sent him to converse with the people on the Holy Gabriel. The interpreters spoke with them in the Koriak tongue, but they could not understand each other much. It is clear from Midshipman Chaplin's description that Bering was trying to get local information about the further course of the coastline ahead and whether it would keep extending to the east.7 A reconstruction of the scene has been made by a modern Russian marine painter, Igor Pshenichnyj.8 The swimming local informant on his seal skin bladder was an unforeseeable event, but it remains a fact that Bering counted on using local information since he took two Koriak interpreters with him, in spite of the shortage of space on the ship. To give room for them, Bering had to leave his orthodox priest behind on Kamchatka. Bering's choice of Koriaks was an informed decision, not only because the Koriaks were nomads of Northern Kamchatka and beyond, but also because their language was related to the Chukchi language, probably about as close as English to German. He could hardly have brought a Chukchi interpreter, because the Chukchis at this time - and for many years still to come - remained independent of the Russians and did not pay tribute to the Russian Crown. Ten years

^{7.} Fedorova, Møller, Sedov and Urness (eds.) (2010), p. 133.

^{8.} Fig. 3.

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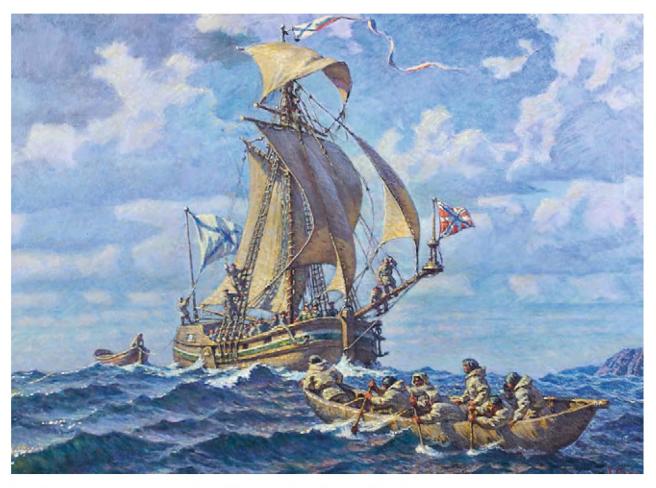


Fig. 3. The encounter between the Holy Gabriel and eight Chuckchis in a skin boat on 8 August 1728, painting by Igor Pshenichnyi. Courtesy the artist. Photo by Nikolai Turkin.

later, during the Second KE, Captain Spangberg brought Ainu interpreters with him on his voyage in search of Japan, but they proved useless when he actually reached Japan.

On the whole, the aboriginal peoples served the Kamchatka-expeditions as a workforce rather than as a source of information. Two cases are usually referred to as examples of the rigid exploitation by the expedition of the natives' labour and resources. For transportation of provisions and heavy materiel from Iakutsk to Okhotsk in the autumn of 1726, Bering requisitioned some 800 pack horses that were provided by the Iakuts who also assisted as skilled horse drivers. All these horses died either en route or after arrival in Okhotsk where no supply of hay had been

prepared. The following winter 1727-28, Bering used the local Itelmens and their dog sleds to transport the same provisions and heavy materiel across Kamchatka which resulted in a serious decrease in the dog population on the peninsula.

During the Second KE, the aboriginal peoples of Siberia became a target for systematical description by members of the academic detachment. The books of Steller and of Krasheninnikov have interesting information on the aborigines of Kamchatka. However, the most impressive, though until recently not duly acknowledged contribution to the study of the

^{9.} Steller (1774). In English: Steller (2003). - Krašeninnikov (1755). In English: Krasheninnikov (1972).

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Siberian peoples was made by Academy Professor Georg Friedrich Müller. According to the historian of eighteenth-century ethnography, Han F. Vermeulen, Müller "deserves a special place in the history of anthropology".10 His ethnographic work includes, perhaps most prominently, a comparative description of Siberian peoples, Beschreibung der Sibirischen Völker, which is also an early attempt at establishing "Völkerbeschreibung" as a scientific discipline in its own right. It has only recently been published in complete form, by Hintzsche and Elert. In his preface, Müller claims that one does not easily find another realm in the world where so many different peoples have been united under one sceptre as in Russia. Especially Siberia, where he has travelled for ten years, offers so much material to a separate, still not sufficiently developed branch of history devoted to the study of peoples in general." Highly interesting are also Müller's instructions for himself and other members of the academic detachment, including elaborate questionnaires for ethnographic fieldwork.12

However, the aborigines were not the only local population in Siberia. During the seventeenth-century Russia had made an impressive push to the east. As a result, Siberia had become a unique frontier, huge in territory, but thinly populated. Here Russian officials, fur hunters, peasants, craftsmen, merchants, and exiled prisoners lived among a variety of aboriginal peoples whom the Russians broadly referred to as *inozemtsy*, that is "foreigners". The expedition personnel had to interact with this multifarious population in order to accomplish their goals. The expeditions clearly stressed the human and material resources of the frontier country they passed through.

The detachments of the KEs carried written orders from the central imperial authorities to the local Russian authorities to provide every kind of assistance to the expedition, including transportation, provisions, and manpower. Unlike Niebuhr and his colleagues, Bering's men were never really abroad, no matter how far they travelled. They crossed through a vast territory under Russian jurisdiction, and could in principle rely on local assistance, even if Eastern Siberia was a frontier with only rudimentary Russian civilization. However, conflicts between the Kamchatka expeditions and the local authorities in Siberia were inevitable and many. There was a basic clash of interests between the two. The most important task of the Russian administration in Eastern Siberia was to extract tribute, the so-called iasak, from the natives. It was a tax usually paid in furs and collected on a yearly basis. Compelled to assist the expeditions, the local authorities felt obstructed, and justifiably so, in their efforts to collect the required quantity of furs. Another important local task was to collect a state income from the sale of vodka and tobacco. The sale of these much demanded stimulants was a state monopoly, also in the Siberian outposts, but became a source of conflict between the local authorities and expedition personnel. The Second KE distilled its own alcohol. Bering had permission and equipment to do so, officially for medical purposes, but the line was hard to draw in the wild East. As for tobacco, the Second KE also appears to have been strikingly self-sufficient. The local authorities, on their part, would often choose to turn a deaf ear to expedition demands for assistance.

Conflicts between local administrations and expedition personnel escalated during the huge Second KE. A kind of diarchy came into existence in the two major Siberian centres of preparation for the expedition, Iakutsk (on the Lena River) and Okhotsk (on the Pacific coast), where expedition personnel periodically may even have outnumbered the local Russians. Frequent quarrels, mutual complaints, denunciations and arrests, physical violence and brawls, became the order of the day. During Bering's long sojourn in Iakutsk (1734-37) his navy personnel played an active part in local affairs, for instance by their violent arrest of Lieutenant Kuz'ma Skader of the Iakutsk Regiment in March 1735. The most painful and

^{10.} Vermeulen (2008), p. 99.

^{11.} Müller (2010), p. 13.

^{12.} Müller's instructions are the theme of a printed PhD thesis by Bucher (2002).

^{13.} For Bering's report on this incident, see Ochotina-Lind and Mëller (eds.) (2009), pp. 233-236. For a more general picture,

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long-lasting conflict was with G. Skorniakov-Pisarev, commander of the port of Okhotsk, where the ships for the Second KE were being built. A peak event occurred in September 1736, when Skorniakov-Pisarev secretly fled from Okhotsk to Iakutsk, where he chose to remain for a year, allegedly as a precautionary measure against the wrath of Captain Spangberg, Bering's commanding officer in Okhotsk. Finally, in 1740, repeated complaints from Bering to the authorities in St. Petersburg resulted in the arrival of a new commander to replace Skorniakov-Pisarev.

Smaller in scale, but no less characteristic of the tensions prevalent in Eastern Siberia at the time of the Second KE, was the experience of navigator Semion Cheliuskin in the polar night of December 1736. He set out for Iakutsk from the winter quarters of his detachment on the Oleniok River, near the coast of the Arctic Ocean, to report to Bering about the navigation of the double-sloop "Iakutsk" in the summer of 1736 and about the death of her commander, Lieutenant Vasilii Pronchishchev, and to receive new instructions. On 18 January 1737, after almost a month of walking, he reached Siktatskoe, the winter quarters of iasak-collectors on the lower Lena River. Presenting his KE credentials to a collector named Tarlykov, Cheliuskin asked for a sledge and dogs to take him to Iakutsk in a hurry. Tarlykov refused flatly and even denied entrance to his yurt, since it contained "iasak belonging to the State Treasury". In the end, Cheliuskin resorted to violence, forcing a local Iakut to surrender his sledge and seven lean dogs for urgent KE business.14

In spite of the described tensions, the Russian population of Siberia harboured information that could be put to use by the KEs. From the very beginning of the First KE, Bering was eager to meet Russians that had travelled to remote parts of the territo-

ry, be it as fur hunters, iasak-collectors or as soldiers in distant forts and outposts. The academic members of the Second KE were to continue his efforts to use local information. A striking example is the "field work" of the above-mentioned Professor Müller as a historian. He understood that local information might also come on paper. One of his great services to the study of Siberian history was to read and copy information preserved in local archives. In 1736 and 1737 he examined the archives of the Iakutsk office and found documentary evidence that a Russian tribute collector, Semion Dezhniov, had managed, as early as in 1648, to sail from the Arctic Ocean through the Bering Strait into the Pacific in a light sailboat. In other words, Müller discovered in the course of the Second KE that Bering had not been the first to pass through the strait later named after him.15

One might add that numerous Chukchi and Eskimos had undoubtedly sailed in and out of the strait before both Dezhniov and Bering, but this only goes to show the Eurocentric nature of geographic discovery. As we know, the route from Africa to India was new to Vasco da Gama, but not to his Arab pilot. However, there is more to geographic discovery than Eurocentrism. There is also the question of geographical overview and mapping skills. In Russia, Dezhniov eventually became the hero of the Strait, the simple, uneducated Russian who had the courage and stamina to make a perilous voyage with primitive means. But Bering remained the modern explorer who could relate his discovery to the contemporary state of knowledge and put it on a map.

When Bering returned to St. Petersburg in 1730 after the First KE, he was welcomed by the Russian Academy of Sciences that had come into existence during his absence. All the professors were foreigners, most of them Germans. Some, especially Müller and the French astronomer Joseph-Nicolas Delisle, took a vivid interest in interpreting the results of the return-

see Chapter 2, "Sojourn in Iakutsk", in Møller and Okhotina Lind (2008), pp. 19-32.

^{14.} Cheliuskin's complaint to the Admiralty College in St. Petersburg about the incident is now in the Russian State Naval Archives (RGAVMF), fond 216, inventory 1, unit 24, pp. 280-282. It will appear in Ochotina-Lind and Meller (eds.) (forthcoming).

^{15.} Müller's original manuscript is in the Russian State Archives of Ancient Documents (RGADA), fond 248, inventory 12, book 669, pp. 164-187. It will appear in Ochotina-Lind and Mëller (eds.) (forthcoming).

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ing expedition. They interviewed Bering, and during their talks Müller acted as interpreter between Delisle who knew neither German nor Russian, and Bering who knew no French.16 Müller saw the achievements of the expedition in the light of the English and Dutch interest in a North-eastern Passage to the Far East. Delisle was more interested in the accuracy of the longitudes of towns in Siberia and on Kamchatka, determined by the expedition. The enthusiasm of the academicians, together with Bering's powerful connections in government circles, led to the imperial decision in 1732 to launch a second, much larger Kamchatka expedition, again under Bering's command. The Academy accepted an invitation to join the Second Kamchatka Expedition, and both professors were active in formulating the instructions for the academic detachment. While the first expedition can hardly be called scientific, in the same sense as Niebuhr's Arabian expedition, the Second one certainly was. It swelled with scientific ambition and personnel, as specified in instructions for the work to be carried out in the natural sciences, history and ethnography. The instructions for the naval detachments were equally ambitious. They aimed at mapping the entire northern coast of Siberia and finding the sea route from Siberia to Japan and to America.

Missionary work among the natives of Kamchatka was explicitly mentioned in Empress Anna Ioannovnas's order to launch the expedition. After his first expedition, Bering had suggested, among a series of 15 proposals for improvements of conditions in Eastern Siberia, that one or two native priests be sent out to spread the Christian faith among the Iakuts, since the Iakuts themselves were reluctant to come to the Russian town of Iakutsk, for fear of small pox. 7 As for Kamchatka, Bering had been appalled to see how the Itelmens in a most unchristian way excluded their sick and old people and left them to die on their own. He also reported on frequent suicides among the Itelmens, by drowning. Russian control over the aboriginal peoples of Siberia was exercised through the sys-

tematic taking of hostages, usually children of native chieftains who came to live in Russian forts and garrisons for an agreed period of time, after which they were returned and replaced by new hostages. Bering recommended giving the hostages on Kamchatka an intensified Christian upbringing, in order that they might after their release carry the Christian faith out to their own people.¹⁸

Possibly moved by Bering's information about the sad plight of the aborigines, the Empress ordered that priests be dispatched with the Second KE for missionary work on Kamchatka. At the time of the First KE there was only one orthodox priest on the peninsula, and only one out of the three major Russian settlements on Kamchatka had a church. Following the imperial order, the Holy Synod (roughly, the church ministry) appointed three orthodox clerics under Igumen Varfolomei Filevskii to travel with the Second KE to Kamchatka. Another seven were appointed to serve the religious needs of the expedition personnel and to participate in the voyages. However, Igumen Filevskii's mission failed, because the missionaries started quarrelling among themselves and were returned before they ever reached Kamchatka.

Nevertheless, conversions did take place during the expedition. One curious proof of it became apparent when Bering's belongings were assessed and sold after his death. It turned out that he owed three rubles to one of his sailors, boatswain Aleksei Ivanov, "for three shirts, which the commander had himself borrowed of him, while they were still in Kamchatka, as a christening present for newly converted Kamchatkans." ¹⁹

Another indication of Bering's concern for the missionary work may be found in recently discovered private letters dispatched from Okhotsk in February 1740, by the commander and his wife Anna Christina in Okhotsk to friends and relatives back in St. Petersburg. Writing to his brother-in-law, Bering reported that more than thirty Tungus were baptized in Okhotsk over the past 2½ months, but many more on

^{16.} Fedorova, Møller, Sedov and Urness (eds.) (2010), p. 268.

^{17.} Ochotina-Lind and Mëller (eds.) (2001), p. 19.

^{18.} Ochotina-Lind and Mëller (eds.) (2001), pp. 21-22.

^{19.} Møller and Okhotina Lind (2008), pp. 131-132.

Kamchatka in the preceding year. "I need teachers both here and on *Chamsiatke*." His information was echoed by Madame Bering in her letter to Mrs. Hohenholz, wife of the Austrian Minister in St. Petersburg: "There are plenty of pagans even if many of them have been baptized in the past year." ²¹

The German natural historian Georg Wilhelm Steller, who made it all the way to Kamchatka and sailed with Bering to Alaska, suggested that the Itelmen of Kamchatka were more disposed for Christianity than other peoples in the Russian empire, since they had so little theological and moral culture of their own to start out with:

One can bring one hundred Itelmen to the Christian religion in one hour by simply explaining the religion, when in a hundred years few of the Yakuts, Tungus, Buryats and Tatars have been brought to it. Since 1740 there are few people left on Kamchatka who have not yet been brought into the Christian religion through holy baptism. By now, it takes many people to plead for several months to persuade a person to become a godfather, since this baptism of the heathens is already so common that prospective godfathers shy away from the modest costs of the baptism. The greatest precaution to be taken here is to instruct the new converts in the basics of the religion, which has to happen by establishing schools and installing genuine, conscientious priests who are more concerned with the honour of God and the improvement of the country than with their own interests.22

Bering himself was a religious man and a member of the German speaking protestant congregation in St. Petersburg. Thanks to the religious tolerance in Russia at the time, he was allowed to bring a Lutheran priest with him on the Second KE. The Petersburg congregation was under strong influence from the pietism propagated by August Herman Francke in Halle, and the priest that agreed to come along to Kamchatka was a former teacher at Francke's famous orphanage in Halle. His name was Christian Ernest

Millies. In a letter to his brethren in Halle he delighted in the fact that God had chosen him to bring the natives of distant Kamchatka into the Christian faith. From the Russian navy point of view, however, Millies was only to serve the religious needs of the foreign officers of the Kamchatka expedition. As it turned out, he was unable to do either. Having travelled as far as to Tobolsk in Western Siberia, which was only a minor portion of the total journey, he lost his nerve and demanded instant return to civilization. This, however, was not an option under his contract with the navy, and as the pastor very reluctantly proceeded further east, he gradually went mad, and was haunted by loud threatening voices. In his despair, he accused Bering of high treason. He was then placed under arrest, and spent about a year as a prisoner, most of the time in solitary confinement in Iakutsk, before Bering found a way of escorting him back to St. Petersburg. From here he was later expelled to Germany.²³ So much for hallenser Pietismus on Kamchatka. In real life, conversion of the aborigines of Kamchatka seems to have happened through their inevitable contact with the common orthodox Russian colonizers.

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^{20.} Møller and Okhotina Lind (2008), pp. 53-53.

^{21.} Møller and Okhotina Lind (2008), pp. 104-105.

^{22.} Steller (2003), pp. 212-213.

^{23.} A number of letters by Millies about his Russian *via dolorosa* are printed – in the original German and in Russian translation – in Ochotina-Lind and Mëller (eds.) (2009).

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From Biblical Philology to Scientific Achievement and Cultural Understanding: Carsten Niebuhr, Peter Forsskål and Frederik von Haven and the Transformation of the Danish Expedition to Arabia 1761-1767

Lawrence J. Baack

Abstract

The Danish Expedition to Arabia in the eighteenth century is famous as a quintessential project of the Northern European Enlightenment. But it was a project whose character changed fundamentally over time. In the course of seven years it was transformed from an endeavour whose central focus was biblical philology, using inquiry into the Middle East as a vehicle to better understand the historical and cultural context of the Old Testament, to one whose greatest achievements lay in the natural sciences, cartography, cultural geography, epigraphy and archaeology. Thus it changed from an effort that was essentially Euro-centric to one which was interested in the sciences and the Middle East in their own right, not just as tools for unravelling the meaning of an essential text of the western tradition. This process of transformation was the product of several forces, most of them tied to the roles played by the three principal investigators – Frederik von Haven, Peter Forsskål and Carsten Niebuhr. Exploring these roles and the process of change is the topic of this paper.

The Danish Expedition to Arabia was a quintessential project of the Northern European Enlightenment – a project of intellectual inquiry and sustained curiosity. Like the intellectual movement that spawned it, but on a small scale, it was a dynamic, evolving historical phenomenon, full of diversity and even surprises. From inception to completion and interpretation, the expedition's character changed dramatically. It was transformed from an initiative whose principal purpose was biblical philology to an endeavour whose

The original idea for the Danish Expedition came from Johann David Michaelis at the University in Göttingen, a leading biblical scholar and today studied also for his idiosyncratic contribution to eighteenth century anti-semitism in Germany.² For Michaelis the

central achievements were in scientific investigation, palaeography, archaeology and cultural studies. This process of transformation was the product of several forces, most of them tied to the roles played by the three principal investigators – Frederik von Haven, Peter Forsskål and Carsten Niebuhr. It is these roles and the personal and scientific contexts of their work that we will explore.

^{1.} For scholarly discussions of the expedition see the collection of essays in Rasmussen (1990a), Wiesehöfer and Conermann (2002), and Baack (2013c). Also see the important exhibition catalog by Rasmussen (1986).

^{2.} For an overview of Michaelis's entire career, see the

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expedition was to be a practical, field demonstration of his neologist methodologies for biblical studies. That is, he wanted to apply a variety of historical, philological and scientific disciplines to the task of discovering the historical and cultural context in which the Old Testament was set down.3 Originally suggested in a presentation in Göttingen in 1753, and then later elaborated in letters to Johann Hartwig Ernst von Bernstorff, the Danish Foreign minister, Michaelis proposed sending a single scholar, fluent in Arabic, to Arabia to investigate the geography, natural history, language and customs of the region in order to more accurately interpret the Bible as an artifact of an hypothesized classical ancient Israelite civilization.4 His attention was drawn to Arabia, and especially Yemen, because he judged the area to have been little affected through the centuries by foreign conquest or foreign trade. There he believed "the old customs of the House of Abraham" would still be discernible.5

Why Michaelis decided to approach the Kingdom of Denmark-Norway, and not one of the German states, such as Hanover is a somewhat complicated question beyond the scope of this paper. But there is little doubt that his interest in Denmark was awakened by the publication one year earlier in 1755 of the account of the voyage of the Danish naval captain,

excellent studies of Löwenbrück (1986, 1988, and 1995). Also see the thorough review by Hübner (2002), and the works of Sheehan (2005), Legaspi (2005), Carhart (2007) and Hess (2002), which cover various aspects of his contributions.

3. Reill (1975), p. 44.

Frederik Ludwig Norden to Egypt, analyzed in the Introduction to this volume. Norden was able to gather much valuable information and to execute many handsome drawings and charts during his journey, but the publication of his report was delayed for many years before appearing as a publication of the Royal Danish Academy of Sciences in French in a beautiful two-volume set with magnificent illustrations. We know that Michaelis had seen the two volumes just prior to contacting Bernstorff, so at a time when he was looking for a sponsor for his idea, Denmark's support of a similar undertaking years earlier was brought to his attention.

Under the guidance of Bernstorff the scale of the expedition soon grew to a team of six, with three principal investigators, a physician, professional illustrator and an orderly. Michaelis was directed by Bernstorff to craft detailed instructions for the expedition which, in the course of many drafts and with input from other scholars and officials in Copenhagen, he did. In addition he crafted some 100 questions for the

6. The volumes were reviewed in the Göttingische Anzeigen von gelehrten Sachen of February 1756, for which Michaelis was the editor. There it was noted that Norden made many orthographical errors in recording place names on his charts because he did not know Arabic. This criticism was repeated in Michaelis's proposal (along with praise of the project) to Bernstorff. See Michaelis to Bernstorff, 30 August 1756, 2 drafts, NSuUG, Cod. Ms. Mich. 320, Bl. 217-218, and RaK, AR, Case 3-003, Nr. 2. Also see Pedersen (1992): 66-67. 7. The physician was Christian C. Kramer, a Dane; the illustrator was the German, Georg Wilhelm Baurenfeind; and the orderly, Lars Berggren, was from Sweden. 8. For the extensive correspondence on the instructions and the additions from scholars in Copenhagen, see Bernstorff to Michaelis, 2 October 1756, NSuUG, Cod. Ms. Mich. 320, Bl. 231-232; Bernstorff to Michaelis, 8 January 1760, NSuUG, Cod. Ms. Mich. 320, Bl. 273-274; Bernstorff to Michaelis, 23 June 1760, NSuUG, Cod. Ms. Mich. 320, Bl. 275; J.C. Kall to Bernstorff, 26 August 1760, RaK, AR, Case 3-003, Nr. 69 c-d, and NSuUG, Cod. Ms. Mich. 320, Bl. 294-299; Ascanius and Oeder Pro Memoria, 29 August 1760, RaK, AR, Case 3-003, Nr. 69b and NSuUG, Cod. Ms. Mich. 320, Bl. 300-301; Bernstorff to Michaelis, 21 October 1760, NSuUG, Cod. Ms. Mich. 320, Bl. 292-293, and RaK, AR, Case 3-003, Nr. 75 and 75 c-d. For additional documents on the evolution of the

^{4.} For his original mention of the idea see Göttingische Anzeigen von gelehrten Sachen, 139 (17 November 1753), 1241-1244. For the initial proposal and correspondence with Bernstorff, see Michaelis to Bernstorff, 20 May 1756, Rigsarkiv København (hereafter RaK), Tyske Kancelli. Udenrigske Afdeling – Arkiv 301. Almindelig Del III, Arabiske Rejse (hereafter AR), Case 3-003, Nr. 1a-b; Bernstorff to Michaelis, 3 August 1756, Niedersächsische Staats- und Universitäts-Bibliothek, Göttingen, Nachlass von Johann David Michaelis (hereafter cited as NSuUG, Cod. Ms. Mich.) 320, Bl. 211; and Michaelis to Bernstorff, 30 August 1756, 2 Drafts, NSuUG, Cod. Ms. Mich. 320, Bl. 212-230, and RaK, AR, Case 3-003, Nr. 2. 5. Göttingische Anzeigen von gelehrten Sachen 139 (17 November 1753), p. 1242.

expedition later published as his famous Fragen an eine Gesellschaft gelehrter Männer.9 The questions focused almost exclusively on the Bible.10 Michaelis also solicited questions from all over Europe and he received a variety of responses." The most important was from the Académie royale des inscriptions et des belles lettres in Paris. 12 This forty page document made scant reference to the Bible, concentrating instead on understanding Arabia during its Islamic period. Also contributing to the Instructions were scholars in Copenhagen, notably Christian Gottlieb Kratzenstein, a professor of experimental physics and medicine at the University of Copenhagen. His lengthy paper set forth suggestions for the expedition in botany, zoology, especially marine biology, and the navigational sciences.13 His submission was pure science.

In the end the final Royal Instructions retained a strong focus on biblical philology, reflecting Michaelis's central intellectual role and the interests of Frederick V, Bernstorff and Adam Gottlieb von Moltke, the chief advisor to the king.¹⁴ But we can already see

instructions, see Michaelis to Bernstorff, 15 July 1760, NSuUG, Cod. Ms. Mich. 320, Bl. 276-285, for the original draft, and for its different versions, Bernstorff to Michaelis, 21 October 1760, NSuUG, Cod. Ms. Mich. 320, Bl. 292-317, and the many iterations in RaK, AR, Case 3-003, Nr. 85a-85j. 9. Michaelis (1762).

10. As Michaelis wrote in the Preface or *Vorrede* to the *Fragen*, "Almost all of the questions I have posed refer to the elucidation of the Holy Scripture. I can see from the outset that this might displease some, and will appear as much too theological."

11. For the invitation to submit questions, see Göttingische Anzeigen von gelehrten Sachen 16 (7 February 1760), pp. 129-131.

12. Mémoire adressé au nom de l'Académie Royale des Inscriptions et Belles Lettres de France à Messieurs les Académiens Danois qui se disposent à faire le voyage de l'Arabie Heureuse, RaK, AR, Case 3-003, Nr. 86d.

13. See Kratzenstein to Bernstorff, 26 November 1760, RaK, AR, Case 3-003, Nr. 80a.

14. The original instructions, signed by the King and Bernstorff, and retained by Niebuhr, are now located in the archives of the Dithmarscher Landesmuseum, Meldorf, file DLM 26000. For other copies see Bernstorff to Michaelis, 4 March 1761, with its enclosure, NSuUG, Cod. Ms. Mich. 320, Bl. 319-328, and one that is more accessible in Rasmussen (1986), pp. 59-78. It is based on a copy of the original

in their content that the emphasis was shifting imperceptibly away from philology to more general science. The expedition no longer focused on a single philologist, broadly trained going to Arabia, but now also had a natural scientist and a cartographer/astronomer, thus strengthening the resources devoted to these disciplines. Naturally the extent to which these disciplines would present themselves, depended on the vigour and talent of the members of the expedition who represented them, and the character of their encounter with the culture they were visiting. Moreover, because of problems in execution, the expedition did not leave Copenhagen with a full compilation of Michaelis's Fragen, but actually received only two brief questions from Michaelis before they left. It was not until well into the journey, shortly before the death of most of the members, that the party received a full collection of Michaelis's questions.15 However, upon their departure they were provided with a full set of the questions from the French Académie, Kratzenstein's paper and copies of the questions from other European scholars. 16 These dealt mainly with the sciences and geography. Thus the process of the transformation of the expedition was set in motion before the members left port.

Frederik Christian von Haven

Now let us turn our attention to the three principal investigators - Haven, Forsskål and Niebuhr. Frederik Christian von Haven was the first member selected for the expedition and by virtue of his field, philology, and nationality, Danish, was viewed as the most prominent member of the expedition. Coming from a clerical family, he studied theology and philology at the universities in Copenhagen and Göttingen and became one of Michaelis's students, training in Ara-

document recorded by Frederik von Haven in his journal. 15. Niebuhr, *Beschreibung*, xvi. Also Bernstorff to Gähler, 7 July 1761 and 28 March 1762, RaK, Tyrkiet, Gesandtskaberarkiver, Case 79-13, and Niebuhr to Temler, 30 October 1764, Archive of the Berlin-Brandenburgische Akademie der Wissenschaften (hereafter cited as BBAW), Nachlass C. Niebuhr, Nr. 28. 16. Paragraph 14, Royal Instructions, see fn.13 above.

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bic, the Bible and the natural sciences.¹⁷ Michaelis thought very highly of his ability and recommended him for the expedition.¹⁸ In preparation for the trip Haven continued his studies in Göttingen under Michaelis, reading texts in Arabic and Hebrew in the library, and later studying in Rome to enhance his knowledge of Arabic and Syriac. Thus Haven had a strong classical education with strength in Middle Eastern languages.

As the expedition's philologist, his assignments in the Instructions naturally dealt with the Bible and religion.¹⁹ Paragraphs 11, 12 and 35-42 directed him to do the following:

- observe Arab customs for the light they might shed on understanding Holy Scripture and mosaic law;
- gather information from contemporary, colloquial Arabic and its different dialects that might illuminate terminology in the Bible;
- study the oldest Arabic, Hebrew and Syriac scripts, seek out ancient writings on the religion of the Sabaeans and other pre-Islamic religious practices and make copies of old Hebrew and Greek codices of the Bible;
- acquire instructive manuscripts and books in Arabic and Hebrew that were relevant to the purpose of the expedition; and finally
- copy old Arabic and other Middle Eastern inscriptions, most particularly ones from the Sinai Peninsula believed to be from the time of Moses.

Although the elaboration of his assignments in the Instructions was more brief than for the other principal investigators, his responsibilities still made clear the important place of biblical philology in the objectives of the expedition. Yet despite the original centrality of philology in the expedition's objectives, Haven was able to meet his responsibilities in only two areas - the acquisition of manuscripts, and to a much lesser extent, lexicography, where, for example, he collected eventually seven pages of corrections to the Arabic names used in Norden's map of the Nile among other listings.20 Indeed he was astute and knowledgeable in the purchase, mainly in Istanbul and Cairo, of 116 very valuable volumes in Arabic and Hebrew.²¹ They focused mainly on history and poetry, but also included old codices of the Hebrew Bible.22 Today they are nearly all part of the collections of the Royal Library in Copenhagen. The rest of his assignments were never completed, or in most cases, it appears, even started. What accounts for this failure? The answer lies in Haven's personality, perspective, death and the characteristics of the discipline he represented.

Unfortunately for the expedition, Haven had a difficult personality. While he was bright, academically well-prepared and at times capable of conscientious work, he was also petulant, pretentious and egotistical to an extreme. These latter traits were made more irritating to his colleagues by his disdain for

17. The best information on Haven's early life is in the Introduction by Anne Haslund Hansen to his travel diary of the expedition. See Hansen and Rasmussen (2005). Also see Helk, (1980), p. 135, and Selle (1927), the entry Fridericus Christianus von Haven. Hafniensis, Theol. Juni 28, 1751. Nr. 184 (3835.) p. 89. For his assignment and studies in Rome see Bernstorff to Michaelis, 27 June 1758, NSuUG, Cod. Ms. Mich. 320, Bl. 245-247; and Haven to Bernstorff, all RaK, AR, Case 3-003, 21 April 1759, Nr. 21, 26 January 1760, Nr. 45, 23 February 1760, Nr. 47, 22 March 1760, Nr. 48, 23 April 1760, Nr. 49, 24 May 1760, Nr. 50, 28 May 1760, Nr. 52 and 7 June 1760, Nr. 51.

20. See Frederik Christian von Havens Rejsejournal 1760-1763, Det Kongelige Bibliotek, NKS 133, 2°. Vol. 1, 453-460.
21. For a full listing of the purchases, see Kirketerp-Møller (1970 and 1979-80). Also see Haven to Gähler, 27 July 1762, RaK, AR, Case 3-005, File 1, Nr. 27/27a, and Haven to Gähler, 26 August 1762, RaK, AR, Case 3-005, File 1, Nr. 32/32a. Sigismund von Gähler was the Danish Ambassador to the Sublime Porte. A useful summary of the purchases may be found in Rasmussen (1990b), pp. 325-336.

22. The codices proved to be useful to Benjamin Kennicott for his project on the Hebrew Bible. For the project and the use of Haven's volumes, see Kane (1977), and Keck (1990). For the sizable correspondence of Bernstorff, who made the volumes available to Kennicott and assisted in other ways, see RaK, AR, case 3-004, Nrs. 33, 33a, 49, 49a, 49b, 55, 114a, 116, 117, and 122a.

^{18.} Michaelis to Bernstorff, 18 October 1756, RaK, AR, Case 3-003, Nr. 6c.

^{19.} For the Instructions, see fn. 13.

them, a lack of fortitude, and a sometimes remarkable laziness.23 Early on one is struck by a lack of vigour or a sense of adventure on Haven's part. For example, two early images come to mind. One is from the very first month of the expedition, when after a failed attempt by the Grønland, the Danish warship that transported the expedition to the Mediterranean, to transit to the North Sea because of stormy weather, Haven complains to Bernstorff about the hardship of a sea voyage. He asks to leave the ship and to travel by land to Marseilles, and his request is approved. He packs his bag and leaves the group.24 Thus at the outset Haven shows little toughness and separates himself from the shared experience of the team. Then later, when the members are in Egypt, visiting the great pyramid of Khufu, they decide to climb to the top. But Haven is too tired and uninterested to accompany them and decides in his words "to pass on this curiosity." 25 Having come thousands of miles to Egypt, how could he simply pass on such an opportunity? There is no spark of commitment on his part.

Moreover, he was really comfortable doing work only in an urban environment – Rome, Istanbul, Alexandria or Cairo – where the infrastructure was at least easily accessible to Europeans. It was in this setting that he did his best work. Once Haven left an urban environment whether in the Sinai, the Red Sea or the first months in Yemen, his productivity virtually disappeared. His death in May of 1763 confirmed the reality that the areas for which he was responsible would most likely not be covered during the expedition. He did not master colloquial Arabic and become

Haven was also hampered in his work by some of the characteristics of his discipline. While Michaelis highlighted the need for first hand field work in his original presentation of the idea of the trip, there was no precedent for such work in any practical sense. The discipline was still centered in libraries and studies focusing on the critical evaluation of texts. Michaelis wanted to correct this, but he had no field experience himself upon which to draw or guidance to share with the researcher. Haven was forced to operate on his own in uncharted research territory, a task for which he was ill-suited.

Finally, the focus on biblical philology, no matter how broadly and creatively Michaelis defined it, was still supremely Euro-centric. The purpose of the expedition was to mine the Middle East for information that would better inform European knowledge of a text of the western tradition. It was never to understand the Arab Middle East as a contemporary culture. Thus Haven, by virtue of his task, viewed Arab society through the lens of philology, his background in Christian theology, and the classical Greco-Roman tradition in which he was educated. Combined, this proved to be a serious impediment to exploring Arab culture with a relatively open mind and limited his ability to produce meaningful results. Thus, his journal, for example, expertly edited recently by Anne Haslund Hansen and Stig Rasmussen, is a very im-

conversant with local dialects as did Forsskål, and increasingly even Niebuhr, whose initial knowledge of Arabic was far inferior to Haven's. He never demonstrated an interest in interacting with the Arab peoples and held himself aloof from them.²⁶ As Niebuhr wrote to Friedrich Nicolai in 1778, "von Haven was to be sure a learned man, but he could not condescend to live in the Middle Eastern way and to interact with Middle Easterners on familiar terms, and such a man cannot collect much."²⁷

^{23.} See Hansen and Rasmussen (2005), pp. 65-68, and among others Forsskål, Niebuhr and Baurenfeind to Gähler, 15 March 1762 (written by Niebuhr), RaK, AR, Case 3-005, File 1, Nr. 14; and Niebuhr to Gähler, 8 January 1762, RaK, AR, Case 3-003, Nr. 123f.

^{24.} Haven to Bernstorff, 15 February 1761, RaK, AR, Case 3-003, Nr. 94a; Bernstorff to Haven, 16 February 1761 (draft), RaK, AR, Case 3-003, Nr. 94; also Hansen and Rasmussen (1990), p. 81; Moltke to Haven, 16 February 1761, Hansen and Rasmussen (1990), p. 80; and Niebuhr (1774-78), Vol. I, p. 5. 25. Haven to Temler, 16 April 1762, in Buhle (1794-96), Vol. 2, pp. 63-68.

^{26.} See for example, Haven's difficulties with Arab guides on a trip to the Sinai, Niebuhr, (1774-1778), Vol. I, p. 226.

^{27.} Niebuhr to Friedrich Nicolai, 20 April 1778, Staatsbibliothek zu Berlin Preußischer Kulturbesitz, Nachlaß Nicolai 53: Niebuhr, Carsten (courtesy of Dieter Lohmeier).

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portant document for the early history of the expedition and for describing the European social environment in which the members initially moved, but once the group leaves Egypt, Haven records almost nothing about Arab culture, religion, and language, even in the context of biblical philology. This is the reality well before his death. Thus we can see that his encounter with the Arab world was severely handicapped by his personality, perspective and discipline, and these combined account for the slender representation of findings directly related to biblical philology in the results of the expedition.

Peter Forsskål

Now let us turn our attention to the Swedish natural scientist for the expedition - Peter Forsskål. In many ways his background was quite similar to Haven's but his personality and increasingly his education were different. Also born into a clerical family, Forsskål received a classical education at Uppsala in theology, philosophy, Latin, Greek and Hebrew. However, at an early age he also accompanied his older brother to the hugely popular lectures of Carl Linnaeus. This began a relationship that would last more than a decade and would lead in time to his becoming one of the great botanist's "apostles". In addition, Forsskål studied oriental languages with Carl Aurivillius, Sweden's most prominent orientalist. He then continued his education in Göttingen where under Michaelis and

28. For example, the period from October 1762 to May 1763, that is up to Haven's death in Al Mukhā, is covered only very briefly by 22 pages of draft notes. For many days the entries are just a single line, just a handful of words, devoid of any scholarly content. See Hansen and Rasmussen (2005), pp. 363-385. With regard to his unpublished notes in his folio journal, except for 13 pages that deal with Yemen, virtually all of the notes appear to come from the period when Haven was in Egypt. See Frederik Christian von Havens Rejsejournal 1760-1763, NKS 133, 2°, Det Kongelige Bibliotek, København. Also for an accessible and detailed elaboration of the journal's contents, see Rasmussen (1990b), pp. 303-325.

others he studied oriental philology, philosophy, theology, Arabic, botany and entomology. Thus his education was somewhat broader than Haven's and had a more scientific bent.

However, of much greater importance to the expedition, Forsskål had, in contrast to Haven, a personality well suited for an expedition of this kind and his results show a real passion for his work. As Niebuhr once wrote, "It was as though he was born to make an Arabian journey."30 For example, we get a glimpse of Forsskål's attitude at the very beginning of his diary. There in its opening, he talks of both the danger and the importance of scholarly research in Yemen, and he adds, "A thorough knowledge of the local language, geography and history is the most suitable preparation for a traveller to any country; but in this case a heroic temperament was needed as well; one had to be prepared to give one's life in the service of science."31 Indeed, Forsskål proved to be a fearless, dedicated and prescient investigator.

Early on he demonstrated a creative, adventurous, stubborn and contrary disposition. For example, his dissertation at Göttingen was an attack on the philosophy of Christian Wolff at a time when the prevailing views in Uppsala were still strongly Wolffian.³² Then upon returning to Sweden, he wrote a thesis entitled *De libertate Civili*, a polemic advocating greater civil liberties for Swedish subjects. It was rejected by the philosophical faculty at Uppsala. Undeterred, Forsskål had it repackaged and published as a pamphlet entitled *Thoughts on Civil Liberty*. Although it had been reviewed by the censor and modified, it was still immediately banned by the government who ordered it confiscated and destroyed. The censor was fired and Forsskål was given a warning.³³

^{29.} For an introduction to Forsskål, see Baack (2013a), Schück (1923), the background essay in Uggla (1950), and Christensen (1918).

^{30.} Niebuhr (1774-1778), Vol. I: p. 401.

^{31.} Uggla (1950) pp. 1-2 (transl. Hansen (2009-2011), Vol. 4, pp. 283-284).

^{32.} The most detailed discussion of Forsskål's philosophical views is Dellner (1953).

^{33.} For a discussion of the incident, see Steinby (1970), and the background essay by Thomas von Vegesack in the Swedish/English publication of the pamphlet, Goldberg et al (2009), pp. 23-39.

Fortunately because of his wide ranging education Michaelis had already offered Forsskål the position of naturalist on the expedition, thus rescuing him from his momentary predicament in Sweden.34 Still, during the protracted discussions over his appointment with Bernstorff, Forsskål proved to be a demanding and prickly negotiator. It was he who insisted that all of the scholarly members of the expedition be of equal status, with none subordinate to another, a principle Bernstorff agreed to and honoured religiously throughout the course of the expedition.35 Forsskål brought to the project great assets - competence in biblical philology, Arabic and the natural sciences. His proficiency in the latter two fields was greatly improved by his preparation in Uppsala during the period between his being appointed to the expedition and its departure. He pored over travel accounts to learn about the customs and culture of the Middle East, and he worked with his earlier professor, Aurivillius, to improve his knowledge of Arabic. Of even greater consequence, he studied closely with Linnaeus in the Botanical Garden in Uppsala mastering his system of plant observation and classification. He also read Linnaeus' just published Instructions for Scientific Travellers, a copy of which Forsskål sent to Michaelis.³⁶ As Forsskål wrote to Bernstorff, he was

34. Michaelis to Forsskål, 1 January 1759, RaK, AR, Case 3-003, Nr. 17c (copy); draft, Michaelis to Forsskål, 1 January 1759, NSuUG, Cod. Ms. Mich. 322, Bl. 255-256. 35. For the negotiations, see the following: Michaelis to Bernstorff, 31 May 1759, RaK, AR, Case 3-003, Nr. 20c; Forsskål to Michaelis, 6 July 1759, NSuUG, Cod. Ms. Mich. 322, Bl. 261-262; Bernstorff to Michaelis, 21 July 1759, RaK, AR, Case 3-003, Nr. 24; Bernstorff to Forsskål, 21 July 1759, RaK, AR, Case 3-003, Nr. 25; Michaelis to Bernstorff, 6 August 1759, RAK, AR, Case 3-003, Nr. 27; Forsskål to Michaelis, 8 August 1759, NSuUG, Cod. Ms. Mich. 322, Bl. 263-264; Forsskål to Bernstorff, 8 August 1759, RaK, AR, Case 3-003, Nr. 30a; Bernstorff to Moltke, 20 August 1759, RaK, AR, Case 3-003, Nr. 28; Moltke to Bernstorff, 5 September 1759, RaK, AR, Case 3-003, Nr. 29; Bernstorff to Forsskål, 11 September 1759, RaK, AR, Case 3-003, Nr. 31; and Bernstorff to Michaelis, 11 September 1759, NSuUG, Cod. Ms. Mich. 320,

36. Forsskål to Michaelis, 25 September 1759, NSuUG, Cod.

using the time "to become a better disciple of Linnaeus."³⁷

Thus Forsskål brought to the expedition a robust association with Linnaeus which included not just a detailed knowledge of Linnaeus' taxonomy, but also training by Linnaeus to become a discriminating and precise scientific observer. This was especially significant for as Sten Lindroth has pointed out, "Linnaeus was ... an empiricist. As an observer and describer of objects of the sciences he has had few if any equals. He belongs to the great empirical tradition of the West."38 The expedition may not have manifested some of Linnaeus' other attributes, such as his strong interest in cameralism, but his standards for observation proved to be of great importance.39 Of course, Forsskål's devotion to Linnaeus and his pronounced Swedish nationalism also introduced a tension into the expedition that had consequences, but there can be no doubt that this immensely talented, energetic and arrogant scientist was at the beginning of the expedition the best prepared of all the members. He served as a good and much admired role model of an empirical field scientist for the, as we shall see, largely uninitiated Carsten Niebuhr. Forsskål was a young polymath of the Enlightenment, full of intellectual curiosity and initially cultural superiority.

Forsskål's instructions for the expedition were quite specific - improve the accuracy of European plant descriptions of the region, elaborate the botanical and zoological listings in Arabic dictionaries, and follow the guidelines laid out by Linnaeus in his instructions. He was directed to pay special attention to any species referred to in the Bible, to retain Arabic nomenclature in both Arabic and Latin script and to

Ms. Mich. 322, Bl. 265-267; also see the report of the Danish envoy to Sweden, Larrey to Bernstorff, 30 November 1759, RaK, AR, Case 3-003, Nr. 38. For the Instructions see Carl Linnaeus (1759), and in Swedish, Fries (1906), Vol. 2, pp. 195-213.

^{37.} Forsskål to Bernstorff, 25 December 1759, RaK, AR, Case 3-003, Nr. 42a.

^{38.} Lindroth (1983), p. 4.

^{39.} On Linnaeus' economic dimension, see especially Koerner (1999).

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support his work with the collection of specimens and illustrations. He was also told to conduct research in marine biology when circumstances permitted, as suggested by Kratzenstein.⁴⁰

Looking at the expedition's results, what was Forsskål's contribution to them? His major botanical work, the Flora Aegyptiaco-Arabica, later edited by Niebuhr and an assistant, was the most complete study of the flora of Egypt and Arabia published in the eighteenth century.44 His zoological work, also published by Niebuhr, received less attention but is no less important. Forsskål's research on the marine biology of the Red Sea was the first scientific investigation of that body of water, and zoologists consider his work to be among "the eighteenth century's most significant zoological publications."42 Forsskål was also a great collector of botanical and zoological specimens. For example, the Herbarium Forsskålii at the Botanical Museum in Copenhagen is made up of approximately 1,846 sheets of dried plant specimens.43 This might be compared with the 239 sheets collected by Meriwether Lewis that comprise the Herbarium of the Lewis and Clark Expedition in the American West.⁴⁴ Finally Forsskål's studies stand out in several other ways. First, he preferred, when possible, to incorporate Arabic names into the scientific nomenclature he adopted, and, as directed by Michaelis, he did retain the name in colloquial Arabic as accurately as he could. In Forsskål's work there is no displacement of indigenous terminology. Indeed it was instead preserved

for both European and Arab scholars. 45 Second, Forsskål's notes comprised descriptions of species containing substantial descriptions of plant habitats, which Niebuhr attempted to preserve in his presentation of Forsskål's research. Valuable in their own right, these kinds of observations also served as the basis for Forsskål's pioneering notes and paper on biogeography, which Niebuhr tried to present and which anticipate the work of Alexander von Humboldt decades later. 46 Thus, there can be no doubt that Forsskål's research represents a significant contribution to science in the eighteenth century and was one of the most important achievements of the Danish Expedition.

We must remember that Forsskål also died early, less than two months after Haven. What then accounts for his great success in a relatively short period of time? The answer lies mainly in Forsskål's personality. There is no doubt that he displayed tremendous energy in his work, but even more importantly he was able early on to set aside his sense of cultural and social superiority, adopted the Arab way of life, and learned to respect the expertise of local inhabitants. In this he differed from Haven. For example, after being attacked and robbed several times while doing field work in Egypt, he was advised to use the local inhabitants to help him in his work. But Niebuhr later wrote, "As Forsskål could not see what use the progress of Botany could have from the activities of such simple men, he had rejected these proposals but later he accepted them reluctantly, and finally, when he had put them into effect he praised them as being beneficial. For" - Niebuhr then added as his own aside -"the Arabs have as country dwellers from childhood learnt the plants by name, and when offered the opportunity they quickly understood the art of herbarizing and the gathering of specimens. In this way he bought for himself for small expense the needed

^{40.} See the Royal Instructions, paragraphs 16-22, as cited in fn. 13 above.

^{41.} Forsskål (1775). For a thorough updating and interpretation of Forsskål's study, accompanied by a very substantive Introduction, see Hepper and Friis (1994).
42. Wolff (1967), p. 32, (1990), pp. 231-237, and Spärck (1963).
43. On Forsskål's collections, see Klausewitz and Nielsen (1965), "Peter Forsskål's (1732-1763) Famous Fish Herbarium," Zoological Museum, Natural History Museum of Denmark (Electronic Resource, 2006), and Wolff (1967), p. 38. For a full listing of the *Herbarium Forsskålii*, see Hepper and Friis (1994), pp. 299-335.

^{44.} For the comparison with Lewis and Clark, see Moulton (1999), p. 3.

^{45.} On this point see the very thorough discussion of Provençal (2010).

^{46.} See Forskål (1775), Introduction, 22, and the translation and discussion in Hepper and Friis (1994), pp. 35-36. Also see Nicolson (1987 and 1990).

peace and security, and made a messenger for the world of science of a robber, who travelling among his own people brought rare desert plants that would never have been seen by the stranger."47 "... That never would have been seen by the stranger..." – these words are pure Niebuhr as we will discuss shortly. He was never confused about who was the "other" in the Middle East and he had a very healthy respect for the knowledge and capabilities of those who lived in the countryside.

Secondly, as a result of his work with Linnaeus, and early botanical investigations in southern France, Malta and Istanbul, Forsskål was well-prepared in field work when he arrived in Egypt.⁴⁸ Moreover, because of the contributions of Linnaeus and others, Botany, in particular, was well-defined with an increasingly standardized set of methodologies. Thus Forsskål had a robust theoretical and practical platform upon which to base his work. Finally, Forsskål pursued his disciplines with genuine enthusiasm and determination that continued virtually until his death.49 This was in stark contrast to Haven's lassitude. Thus, the strengths of both the researcher and the disciplines he pursued account for the remarkable achievements in the natural sciences during the expedition, findings that stand on their own regardless of any relationship to the Bible.

Carsten Niebuhr

Finally let us consider Carsten Niebuhr - the expedition's only survivor, its surprise achiever and the journey's interpreter - the person with whom the Danish Expedition to Arabia will always be inextricably connected. The story of Niebuhr's background is well known. He came from a rural district of northern Hanover, hard on the North Sea coast and the Elbe

Estuary.50 It was a region of proud, independent peasant farmers, among them his family, with a good deal of local self-rule. His education in the local schools was interrupted by the death of his father (his mother had already died when he was an infant), as he then was obligated to work on a relative's farm to learn how to become a farmer. But eventually Niebuhr had other ideas. At age 22 he used his small inheritance to restart his education in Hamburg and then to continue in Göttingen, with the goal of becoming an engineer in the Hanoverian army's Corps of Engineers. He must have been a strong student because it was his mathematics professor in Göttingen who suggested the overage (25) undergraduate to Michaelis as the mathematician for the expedition and connected Niebuhr with Tobias Mayer in Göttingen - the great cartographer and foremost astronomer in Germany in the eighteenth century.51 Once Niebuhr had been accepted for the expedition, he had two years in which to prepare for the trip. He studied Arabic with Michaelis (by Niebuhr's admission without great success), history and other subjects.⁵² With Mayer he was introduced to the basics of astronomy, the art of precise, accurate observation, and cartography. He learned celestial navigation and mastered Mayer's new and difficult Lunar Distance Method for determining longitude. He also met with Mayer each week

50. The best discussion of Niebuhr's early life is Lohmeier (2005); also see Lohmeier (2009); and the charming treatment by Niebuhr's son, the famous historian of Rome, Barthold Georg Niebuhr, *Carsten Niebuhrs Leben*, in B. G. Niebuhr (1828), also in Danish translation, B. G. Niebuhr (2004).

51. See Niebuhr to Heyne, 20 August 1800, NSuUG, Cod. Ms. Lit. hist. 1279 II, Bl. 136; Lohmeier (2009), pp. 196-197; and B. G. Niebuhr (1828), pp. 13-15. The leading study of Tobias Mayer is Eric G. Forbes (1980).

52. B. G. Niebuhr (1828), p. 15; Niebuhr to Johann Beymgraben, 4 January 1759, Archive of the Berlin-Brandenburgische Akademie der Wissenschaften (hereafter cited as BBAW), Nachlass C. Niebuhr, Nr. 24; Michaelis to Bernstorff, 2 April 1759, RaK, AR, Case 3-003, Nr. 20a; and Niebuhr to Bernstorff, 2 April 1759, RaK, AR, Case 3-003, Nr. 19a.

^{47.} Forskål (1775), Introduction, p. 27, transl. from Hepper and Friis (1994), p. 10.

^{48.} On his excursions to the area around Marseilles (Estaque) Forsskål identified 265 species, in Malta an additional 87, and in Istanbul, the Straits and nearby islands, 481 more. See Forskål (1775), pp. i-xxxvi.

^{49.} Uggla (1950), pp. 44 and 156.

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to practice drawing maps and town plans.⁵³ His two year tutorial with Mayer was the most important formal educational experience of his life. In sum, Niebuhr was technically very well trained but lacked a classical education. His knowledge of languages, theology and philosophy was poor or non-existent. He was the least educated of the principal members and the others looked down on him as a result.

Fortunately for him, Niebuhr's official responsibilities for the expedition were narrowly defined.⁵⁴ As the cartographer/astronomer for the expedition, the Instructions directed him to establish the position of towns and geographical features, to record geographic names in Arabic with careful attention to the correct orthography, and to gather a variety of historical geographical data – the growth and decline of towns, land fertility, population change and the like. As time allowed he was to make astronomical observations and to observe the Transit of Venus on June 6, 1761. Finally, he was designated the treasurer of the expedition, much to the disgust of Haven, because Michaelis and Bernstorff were impressed with his sense of responsibility and commitment.⁵⁵

With this relatively limited portfolio of responsibilities in mind, let us turn to Niebuhr's contributions to the overall results of the expedition. For convenience, we may divide them into two categories – his contribution as the interpreter and publisher of the findings of the expedition, including his work in cultural geography, and his more specific scientific and scholarly contributions in such technical fields as cartography, astronomy, archaeology and palaeography. First, it is because of Niebuhr's singular efforts that today we have over 2,000 pages of published material

for scholars to examine. This is not a trivial achievement. The findings of many scientific expeditions in the eighteenth century - that of Bougainville, Cook, Lewis and Clark and La Pérouse, to name a few - for various reasons were presented to the public only partially or not at all. We must remember that Niebuhr was neither a writer, nor an academic. He had no experience in publishing. After Bernstorff's dismissal in 1770, he received very modest on-going support from the Danish government. He paid for 80% of the printing costs of the six volumes of findings and illustrations published in his lifetime, and he went into debt as a consequence.⁵⁶ These included the Beschreibung von Arabien. Aus eigenen Beobachtungen und im Lande selbst gesammelten Nachrichten (Copenhagen, 1772) and the first two volumes of the Reisebeschreibung nach Arabien und andern umliegenden Ländern (Copenhagen, 1774-1778), two volumes of Forsskål's botanical and zoological research, and one volume of species illustrations. In this task he had virtually no help from the academics who had conceived and shaped the expedition in Göttingen and Copenhagen.⁵⁷ It is his voice alone that shapes the received narrative of the expedition.

Second, it is the character of the narrative in Niebuhr's own works and sometimes in his introductions to Forsskål's studies that give his accounts special value. His own works have a single overarching goal - to contribute substantively to a more informed understanding of the Arabian Peninsula and its sur-

^{53.} Niebuhr to Bernstorff, 2 April 1759, RaK, AR, Case 3-003, Nr. 19a; Carsten Niebuhr (1803, 1804).

^{54.} See the Royal Instructions, paragraphs 27-34, as cited in fn. 13 above.

^{55.} For his appointment as treasurer, see Michaelis to Bernstorff, 25 August 1760, RaK, AR, Case 3-003, Nr. 64a; and B. G. Niebuhr (1828), pp. 16-17. For Haven's criticism of the selection of Niebuhr as treasurer, see Frederik Christian von Haven's Rejsejournal 1760-1763, NKS 133 2°, Det Kongelige Bibliotek, København. Pp. 266-267.

^{56.} A discussion of the complicated story of Niebuhr's publication of the findings of the expedition, with its accompanying documentation, is beyond the scope of this study. See the section entitled "The Struggle to Publish the Findings of the Expedition," in Chapter Four of Baack (2013c).

^{57.} For example, despite many requests, Niebuhr received no comments or corrections from Michaelis on his draft manuscript of the *Beschreibung*, which Niebuhr had sent to him. See Niebuhr to Michaelis, 22 October 1770, 22 November 1770, and 8 February 1771, all NSuUG, Cod. Ms. Mich. 326, Bl. 288-294; and Niebuhr to Bernstorff, 9 April 1771, RaK, AR, Arkiv 5129, Bernstorff-Familie, Wotersen, Case 48, Breve til J. H. E. Bernstorff fra forskellige, N-Re. Courtesy of Dieter Lohmeier. He also received no help on the two volumes of the *Reise-beschreibung*.

rounding area on the part of Europeans. His approach is rooted in a basic respect and open-mindedness towards the peoples of the Middle East. As he wrote in the opening to his very first volume, the *Beschreibung*, Arabia was a land, "that is inhabited by a nation that has never been subdued by a foreign people, [and] which, on the contrary, has widely spread its dominion, language, science and religion." Thus, he wants to establish standing for Arabia, and point out that its independence was buttressed by a history of geopolitical, cultural and scientific strength.

Then in his Introduction to the Reisebeschreibung, his more personal account of the expedition, Niebuhr alerts the reader to the intended character of his work. He knows, he wrote, that those who read these accounts enjoy an entertaining, exciting description of the encounters and misfortunes of travellers in a strange land, and he admits, "I could have easily pointed out more pleasing curiosities," but he explains, he would not have fulfilled the aim of the expedition. "I was content, that I found the Arabs to be just as humane as other cultured people, and I experienced pleasant and unpleasant days in the countries I visited, just as every traveller must expect."59 What a calming and non-sensational statement that is. Indeed, Niebuhr's account in the Reisebeschreibung is neither in the tradition of so-called "survival" exploration literature, in which participants overcome formidable obstacles and misadventures, not does it present a panoply of "curiosities" to entice the reader with descriptions of bizarre encounters with strange countries and peoples. No, Niebuhr's account is consistently straightforward, thoroughly unembellished and intended to educate, not to titillate the reader.

Niebuhr's works are also full of small moments, anecdotes, observations, local histories and the like, which he hopes are instructive without being pedantic. For example, he attempts to deal with the nuanced concept of "different" as juxtaposed to "strange" by analogizing to something familiar. Thus in dealing with the European perception, clear from Michaelis's

questions in the *Fragen*, that the practice of eating locusts in the Middle East was strange, Niebuhr writes: "To be sure to Europeans, it is just as inconceivable that Arabs eat locusts with pleasure, as it is unbelievable to Arabs, who have never had contacts with Christians, that Christians consider eating oysters, crabs, shrimp and the like to be an enjoyable meal. In this way the one is as valid as the other." In other words, the practice is different, but not strange.

In other instances Niebuhr used the device of empathy to create a sense of the shared humanity of cultures. For example, as he described once while travelling in a small caravan to Shiraz, "On the evening of the 19th, a wrangler in our caravan suddenly died. His brother expressed his grief over this with terrible crying and howling until late at night. He beat himself sometimes about the head, sometimes on the chest and sometimes on his legs and in general was so inconsolable, that I felt sorry for him that his brother had not died in a town where some of his relatives, or hired female mourners, could have helped him in this ceremony. No one in the caravan appeared to take part in his grief."61 In this case, Niebuhr does not end the story with the man howling and striking himself, which he easily could have done, remarking on its strangeness. Instead, he leads the reader to an appreciation of what would have been more supportive within the man's own culture, and to empathy for the shared common experience of loneliness and grief. And this is what he leaves with the reader.

Niebuhr also tried to support accuracy and toleration in matters of religion and cultural beliefs. Once while crossing the Zab River in northern Iraq, Niebuhr's caravan had to be helped by a community of Yezidis, a people purported incorrectly to be devil worshipers and shunned as a result by Muslims, Jews and Christians alike, and persecuted by Ottoman authorities. Here was a group rejected by everyone. Not surprisingly the Yezidi became a target of Niebuhr's curiosity. He probed and investigated the sect's religion and did not blindly accept the common notion

^{58.} Niebuhr(1772), pp. 5-6.

^{59.} Niebuhr (1774-78), Vol. I, p. xii.

^{60.} Niebuhr (1772), p. 171.

^{61.} Niebuhr (1774-78), Vol. II, p. 104.

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that the group revered Satan. In the end he reported correctly that the group "did not worship the devil, but simply just honoured God as the creator and benefactor of all people."⁶²

Finally, Niebuhr tried to create a better understanding of Middle Eastern cultures through the accumulation and reporting of a huge amount of geographic information. The gathering of some basic geographic data - the size of towns, historic and cartographic information - was called for in the Instructions. But early on, long before the death of his colleagues, Niebuhr decided to take his geographical research in a much more cultural and ethnographic direction. Whether it was agricultural machinery, puppet shows, wedding ceremonies and performing monkeys, or head gear, music and systems of policing and justice, Niebuhr was curious about the daily life of the Egyptians. This curiosity characterized his entire stay in the Middle East, and thus his volumes of published works are rich in details of the cultural geography of the regions he visited, including especially religious groups and practices, tribal structures, local customs, history and languages. His focus was not on the cultural antecedents of the Bible, but on the cultural characteristics of the Middle East itself. As a result, Niebuhr's authored works constitute the most extensive description of the Arabian Peninsula and nearby areas published in the eighteenth century. For over two hundred years they have been valued for their accuracy and open-mindedness. One early reviewer was correct when he held up Niebuhr's work as an ideal example of what was a travel writer's duty - that is to present an account that was accurate, comprehensive, clear and honest - devoid of any "makeup or bluster" (Schminke und Windmacherei). He saw Niebuhr to be a man who was

62. Ibid., p. 345. for a full discussion of the Yezidi and their religion, see Kreyenbroek (1995). As the author notes in his Introduction, "There is probably no factor that has influenced the perception of Yezidism, both in the Middle East and in the West, as much as the erroneous epithet 'devil worshiper.'" This was used to justify their persecution in the Islamic world, and stimulated a sort of romantic fascination with them on the part of western scholars in the 19th Century.

"industrious and tireless, without prejudice and superstition." ⁶³

However, as is well known, beyond geography Niebuhr also produced important results for the expedition in cartography, astronomy, palaeography and archaeology. For example, in cartography, his small scale maps and charts of the Red Sea, Yemen, Oman, the Persian Gulf and the Nile Delta were the most accurate for those areas published in the eighteenth century. His chart of the Nile added to the work begun by Norden on his voyage, but was attentive to the proper use of Arabic so as not to repeat the errors of his predecessor. His 28 town plans, including detailed ones such as his plan of Cairo, are of significant historical value because of their uniqueness for the period. His methodology was not based on the perpetuation or evaluation of historic information and existing maps, but on his own measurements in an area, and information he gathered personally from local inhabitants. ⁶⁴ For example, his chart of the Red Sea is based on 42 positions determined by navigational astronomy and listed over 200 geographical names.⁶⁵ He followed Michaelis's instructions and used local names in Arabic to annotate his maps. He did not adopt or assign European names to local features, as was commonly done, and in fact expressly rejected such a practice.⁶⁶ In summary, Niebuhr's maps and plans represent the greatest single addition to the cartography of the

63. Anton Friedrich Büschings Wöchentliche Nachrichten von neuen
Landcharten, Geographischer, Statistischen und Historischen Bücher und
Sachen, Vol. III, Nr. 15, 10 April 1775, pp. 115-116.
64. Niebuhr (1774-78), I: p. 71. For a discussion of his work in

navigational astronomy and hydrography, see Baack (2013b). 65. For Niebuhr's chart see Mare Rubrum seu Sinus Arabicus ad observationes maximam partem ab Auctore Annis MDCCLXIII et MDCCLXIII institutas delineatus a C. Niebuhr, in Niebuhr (1772), Plate XX. Forty years after the expedition, Niebuhr's calculations for his positions in the Red Sea were published in four articles in Zach's Monatliche Correspondenz zur Beförderung der Erd – und Himmels – Kunde, and later were reproduced in the third volume of the Reisebeschreibung, published posthumously in 1807.

66. Niebuhr to B. G. Niebuhr, 2-6 September 1810, BBAW, Nachlass B. G. Niebuhr, Nr. 230.

Middle East that was produced through field research in the eighteenth century. As one scholar concluded, "Niebuhr was the first to complete systematically precise astronomically determined positions in land travel through essentially unmapped areas and thereby set a new standard for all future undertakings of this kind." ⁶⁷

Let us for a moment return to the words "precise astronomically determined positions," because this part of Niebuhr's work deserves separate attention for two reasons. First, during the initial months at sea on board the Grønland, Niebuhr practiced and perfected the practical use of Mayer's Lunar Distance Method for determining longitude.⁶⁸ It was the accuracy of Niebuhr's observations and calculations, which were received by Mayer shortly before his death at age 39, that encouraged Mayer to continue to pursue the famous Longitude Prize in Great Britain because Niebuhr's work convinced him of the efficacy of his method at sea. In the end his widow shared in the award and Niebuhr's calculations were reproduced in the appendix to the famous British Nautical Almanac, symbolic of his contribution.⁶⁹

Indeed great accuracy characterized Niebuhr's observations throughout the expedition. More than thirty years after his return, the quality of his scientific work was evaluated by a team of three astronomers, led by Franz Xaver Freiherr von Zach. They concluded that "at the time that Niebuhr undertook his jour-

67. Dörflinger (1980), p. 51. For other similar evaluations of

Niebuhr's cartography, see Hopkins (1967); Kejlbo (1990); and the entry for "Niebuhr" in Henze (1992).

68. For a full discussion, based on much archival research of Niebuhr's contribution to Mayer's work on determining longitude, see the two excellent articles by Dieter Lohmeier (2008 and 2010), in addition to Baack (2013b).

69. See "Observations of the Longitude made on board his Danish Majesty's Ship of War the Greenland, after the Method of Professor Mayer's Lunar Tables; calculated by Carsten Niebuhr", appendix to the "New and Correct Tables of the Motions of the Sun and Moon, by Tobias Mayer: To which is added the Method of Finding the Longitude Improved, by the same author, Published by Order of the Commissioners of Longitude, 1767" reproduced in Tobias

Mayer (2006).

ney, there was, other than Tobias Mayer, scarcely an Astronomer in all of Germany who could carry out such astronomical observations with more precision, skill and knowledge than Niebuhr ... it is clear from all his observations and calculations, that he had completely mastered all elements of astronomy, that he was completely familiar with the latest progress in this science, and possessed a practical skill that was without equal."⁷⁰ This judgment is testimony to Mayer's exceptional qualities as a teacher, and to Niebuhr's dedication to scientific excellence.

Finally, Niebuhr had achievements of great significance in archaeology and palaeography. His meticulous copying of hieroglyphs while in Egypt were the most extensive and accurate produced up to that time by any visitor to Egypt. And his insights into the challenge of deciphering the ancient Egyptian writings proved to be prophetic.71 Niebuhr is also recognized for his very detailed descriptions of the subterranean Hindu shrine to Shiva at Elephanta and his extensive representation of the ruins and inscriptions at Persepolis. His drawings and accompanying descriptions at the latter site are considered by the great scholar Heleen Sancisi-Weerdenberg to be "the beginning of truly scientific exploration of that area," and surpassed in accuracy and insight that of any previous traveller.72 Niebuhr's copies of cuneiform inscriptions at Persepolis are legendary for their precision and accompanying diagnostic insights. His work contributed directly to the deciphering of Old Persian and Middle Persian, and indirectly to the understanding of Babylonian-Assyrian and Elamite.73 His assertion that the site owed nothing to Greek or Egyptian derivation contributed to a new appreciation of Persian antiquities as a manifes-

^{70.} Niebuhr (1837), III, Anhang I, pp. 5-7.

^{71.} See Iversen (1993), p. 111, Faure (2004), p. 69 and Hartleben (1906), Vol. I, p. 362.

^{72.} Sancisi-Weerdenburg and Drijvers (1991), p. 21. For a full discussion of Niebuhr's work at Persepolis see above all Wiesehöfer (2002).

^{73.} In addition to Wiesehöfer above, pp. 279-281, also see the very clear discussion in the same author's (1996), pp. 230-242, and the informative account of Harbsmeier (1992).

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tation of Asian culture separate from the Egyptian-Greco tradition.⁷⁴

In summary, taken as a whole, Niebuhr's scholarly results during the expedition are truly remarkable. They have warranted discussion in some detail because his work in cultural geography, cartography, astronomy, palaeography and archaeology dominate the achievements of the expedition and give it a much more scientific and less Euro-centric character. This is accentuated because he is the interpreter of the expedition. What accounts for Niebuhr's emergence as the most important contributor to the results of the expedition and the one who most changed the perspective of the journey? Obviously the death of his colleagues is significant, but long before their deaths, Niebuhr was producing scholarly results in all of the fields mentioned above. Thus their deaths diminishes the contributions that they might have made, but does not account for Niebuhr's productivity. No, Niebuhr's wide ranging success has its origins elsewhere, namely in an unusual synthesis of experience, values and personality wonderfully suited to the task he faced. First, he was extremely competent technically in the scientific fields in which he was trained, and the standards of accuracy and precision he learned from Mayer, and perhaps, indirectly through Forsskål, from Linnaeus, set the tone for his work in other fields as well. Second, he was proud of his peasant heritage and was most comfortable in a rural environment. This is demonstrated by his voluntary move to Meldorf in 1778, where he remained for the rest of his long life.75 Niebuhr was never part of the so-called European metropol, whose members were steeped in the tradition of a classical education and frequently displayed a social and cultural sense of superiority born of that education and their standing as part of the urban middle class and lower nobility. Instead his background helped him to respect the knowledge and way of life of people who lived in the countryside and small towns and formed part of the ever moving groups of pilgrims, small merchants, wranglers, farmers, and mariners with whom he travelled. Third, and lastly, Niebuhr's personality was central to his success. He combined an incredible, unflagging curiosity with conviviality, honesty and humility. He was truly interested in the diverse peoples he met. How many questions must he have asked? How many conversations did he hold with local people – inquiring, listening, and recording usually without judgment. He did this with a cultural generosity, unpretentiousness, openness and eye for detail that is remarkable.

An Expedition Transformed

In Conclusion, the personal contexts of each member had a decisive impact on the course of the expedition. Because of Haven's weaknesses as an overseas investigator and because of the limitations of the field in which he was trained, the central role of biblical philology declined and virtually disappeared. This reality was confirmed by Michaelis in his memoirs, and was noted explicitly in the detailed obituary of Niebuhr written by his famous son, Barthold Georg.⁷⁶ Because of Forsskål's vigorous personality, ability to transcend his background, and the robust character of Botany in the era of Linnaeus, the contributions of the natural sciences to the final scholarly results of the expedition were very great. Finally, because of Niebuhr's rural background, a personality especially well-suited for cross-cultural encounters, and technical scientific excellence, he was able to produce an impressive array of multi-disciplinary scholarly results. From an intellectual perspective, we might observe that the empirical methodologies of Linnaeus and Mayer superseded the biblical philological objec-

^{74.} Niebuhr, "Persepolis", in Niebuhr (1837), Appendix II, p. 132. Also see Niebuhr to Oluf Tychsen, 9 August 1798, quoted in Krieger (2002), pp. 350-351.

^{75.} The best expression of Niebuhr's attitude about his move from Copenhagen to Meldorf is in Niebuhr to Carl Friedrich Spies, draft, n.d. (April 1778), BBAW, Nachlass C. Niebuhr, Nr. 27. Also see Lohmeier (2010b).

^{76.} Michaelis (1793), pp. 74-76. As B. G. Niebuhr wrote with some exaggeration, the original objective of the expedition, at least as manifested in Michaelis's *Fragen*, became "an infinitesimally trivial matter of secondary importance." Niebuhr (1828), p. 12.

tive of Michaelis which the former were originally intended to serve. In addition, the intrinsic natural and cultural richness of the Middle East asserted itself in its daily interaction with Forsskål and especially Niebuhr. Thus, in this encounter the contemporary indigenous cultures were not going to play a subordinate role to a biblical focus.

In the course of seven years the expedition was transformed. While much of the information gathered was in the end useful to Michaelis in his work on mosaic law and the Hebrew Bible generally, enhanced understanding of the Bible was not the main achievement of the Danish Expedition. Its greatest achievement was new understanding of the physical and natural environment of the Middle East and of the peoples who lived there.

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Carsten Niebuhr, Johann David Michaelis, and the Politics of Orientalist Scholarship in Late Eighteenth-Century Germany¹

Jonathan M. Hess

Abstract

Known for his role in promoting and advising the famous Danish expedition to Arabia in the 1760s, the Göttingen scholar Johann David Michaelis was one of eighteenth-century Europe's leading Orientalists, and his works were widely read among both scholars and lay people who were fascinated with the ways he brought secular knowledge about the natural world and culture of the Near East to bear on his understanding of scripture. At key junctures in his career, Michaelis also played a prominent role in political debates, using the expertise on ancient Judaism that propelled and was promoted by the Arabia expedition to style himself as an authority on the conditions under which contemporary Jews might be granted rights. This paper investigates the relationship between Michaelis's vision of Oriental scholarship and his interventions in the debates on Jewish emancipation, exploring the distinctly modern form of antisemitism that Michaelis came to articulate as a leading figure in the field of Oriental Studies. Ultimately, the goal of this exercise is not to locate in Michaelis the origins of forms of nineteenth-century scientific racism that would have made little sense to the Göttingen Orientalist (and even less sense to Niebuhr returning from Arabia). Rather, the relationship between Michaelis and Niebuhr is important because it enables us to reconstruct the complex ways in which knowledge of the ancient Near East mediated by travel could become political, particularly when it came to conceptualizing the relationship between Judaism, Christianity and a modern European political order grounded in the principle of universal citizenship.

Arabs, Jews and the Political Imagination

In an uncharacteristically sentimental moment in his scientific travelogues, Carsten Niebuhr noted that, "coming among [the Arabs], one can hardly help fan-

Hess (2002), pp. 51-89; and Hess (2006), pp. 203-12. Nevertheless, the fundamental question this essay asks as to the motivations beyond Michaelis's interventions in the debates over Jewish emancipation and the specific role of the Niebuhr expedition in this context is completely new.

cying one's self suddenly carried backwards to the ages which succeeded immediately after the flood. We are here tempted to imagine ourselves among the old patriarchs, with whose adventures we have been so

I. Some of the ideas presented here were first worked through in series of earlier publications. See here Hess (2000); the chapter on "Orientalism and the Colonial Imaginary: Johann David Michaelis and the Specter of Racial Antisemitism," in

much amused in our infant days. The language, which has been spoken for time immemorial, and which so nearly resembles that which we have been accustomed to regard as of the most distant antiquity, completes the illusion which the analogy of manners began."2 Opening this essay with this passage makes sense less because it is typical of Niebuhr-tellingly, it appears in the Herron translation but not in Niebuhr's German original3-than because it exemplifies the worldview Niebuhr inherited from Johann David Michaelis, the scholar of Oriental Studies who designed and directed the expedition from his chair at the University of Göttingen. Whatever the advances that the expedition brought about in archaeology, geography, and the natural sciences, its original goal was to mine the modern Near East for data to be used in interpreting the Hebrew Bible. In this context, travel through space became a substitute for travel in time, and the Arabs in Yemen were of interest not in their own right but as a window into the customs of the ancient Israelites. As Michaelis explained in a 1756 letter encouraging the Danish minister Baron von Bernstorff to embrace the idea of the expedition, "the customs of the Jews ... among the Persians, Greeks and Romans, and since their European Diaspora, have changed so much that one can no longer see in them the descendants of the people of whom the Bible speaks."4 Unlike Jews, who cannot claim continuity with their Biblical ancestors, Yemenite Arabs are living remnants of the ancient Near East, immune to the progress of time, offering eighteenth-century Christian biblical critics a treasure trove of insights into the world of their progenitors.

In my paper, I want to focus on how scientific travel helped mediate this triangular relationship between Christian biblical criticism, Arabs and contemporary Jews, concentrating on one prominent context in

which this relationship became politically charged. In this sense I deal less with the Arabian expedition itself than with the ways in which the global knowledge it produced was used locally, in eighteenth-century Germany, in reflecting on whether, how and under what conditions Jews might be granted rights. Michaelis himself intervened directly in the debates on Jewish emancipation unleashed by Christian Dohm's On the Civic Improvement of the Jews in 1781. He did so, moreover, as a leading expert on ancient Judaism, challenging Dohm from within the pages of his Oriental and Exegetical Library. 5 Dohm, an ambitious Prussian civil servant, presented Jews as "unfortunate Asiatic refugees" who, with the proper treatment by the state, would be able to be transformed into productive members of a secular political order that would define citizenship without reference to religion, estate or professional standing.6 Michaelis, who found his scholarship cited at several junctures in Dohm's treatise, rejected Dohm's vision of regenerating the Jews at its most basic level. In an essay that became a touchstone in future debates, he claimed that Mosaic law promoted a level of clannishness that was incompatible with Dohm's vision of universal citizenship, and he argued that Jews, as an "unmixed race of a more southern people," would never have the proper bodily stature to perform military service. "Such a people," he wrote, "can perhaps become useful to us in agriculture and manufacturing, if one manages them in the proper manner. They would be even more useful if we had sugar islands which could depopulate the European fatherland, sugar islands which, with the wealth they produce, nevertheless have an unhealthy climate."7

Certainly, it makes little sense to claim that Michaelis's fantasy of deporting Jews to the West Indies was caused by, or even derived directly from, his

^{2.} Niebuhr (1792), vol. 2, p. 2.

^{3.} This passage also appears in the French translation which Heron used as the basis for his edition of *Travels Through Arabia*: Niebuhr (1780), vol. 2, p. 2.

^{4.} August, 30, 1756, letter from Michaelis to Baron von Bernstorff in Johann David Michaelis (1794), vol. 1, pp. 299-305.

^{5.} Michaelis, review of Dohm, *Orientalische und exegetische Bibliothek* 19 (1782): 1-450, reprinted as "Hrn. Ritter Michaelis Beurtheilung. Ueber die bürgerliche Verbesserung der Juden von Christian Wilhelm Dohm." In: Dohm (1783), vol. 2, pp. 31-71.

^{6.} On Dohm, see Hess (2002), pp. 25-50.

^{7. &}quot;Hrn. Ritter Michaelis Beurtheilung," in Dohm (1781-1783), Vol. 2, here pp. 40-41, 51, 63.

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involvement with the Danish expedition to Arabia. Indeed, rarely does one find anything in Michaelis linking the scholarly ambitions of scientific travel to fantasies of empire. Quite to the contrary, he indulged in recurrent diatribes against colonialism, trade and the progress of empire; like Niebuhr, Michaelis envisioned scientific travel as the antithesis of imperial expansion. The question this paper explores is why the architect of the Arabian expedition was so prone to colonialist thinking when it came to dealing with the Jews living in his midst. On one level, of course, Michaelis's fantasy of colonial deportation is but a simple inversion of Dohm's project of regeneration, a vision of external colonialism in response to what I have described elsewhere as a project of internal colonization.8 But why did the revered Orientalist intervene in these political debates to begin with, much less publicly voice fantasies about banishing the Jews from Europe? On some level, Michaelis's objections to Jewish emancipation in the 1780s certainly match up with reservations he voiced in the 1750s about Jews' moral character in a critical review of Gotthold Lessing's drama The Jews.9 In what follows, however, I want to refrain from speculating about deeply held personal animus Michaelis may have held toward Jews. ¹⁰ I'd like instead to return to the question of his relation to the Niebuhr expedition, exploring his concept of Oriental Studies as a means of understanding his subsequent intervention in political debates.

Michaelis's Moses: Arabs, Jews, and the Academic Study of Mosaic Law

Let me outline his understanding of Oriental studies by focusing on a few examples, looking primarily at his magnum opus *Mosaic Law* (1770-75). Inspired by Montesquieu, Michaelis presented Moses as an enlightened legislator whose legal system needed to be studied in its historical specificity, as a relatively humane code of laws created to govern the ancient Israelites. The Israelites, to be sure, were a primitive people in need of a type of jurisprudence that was out of sync with eighteenth-century norms, but their legal system needed to be understood and appreciated as a model legislative system, one of the crowning moments of the ancient Orient. Michaelis's objective for writing the work was not to indulge in Romantic fantasies about the Oriental past. He wanted, rather, to understand the "foreign" and "Asiatic" laws of Moses in their historical specificity in order to enable Europeans to gain distance from their Oriental heritage." By setting the laws of Moses in historical context and demonstrating that "according to God's will they were supposed to be binding to no other people than the Israelite," he sought to destroy their lingering hold on the present, to purge the contemporary judicial system of its Oriental past.12 Relegating Mosaic law to ancient Jewish history meant de-Orientalizing the present, and this effort hinged on an eighteenthcentury model of history that celebrated modern Europe as the telos of world-historical progress. Michaelis routinely juxtaposed the modern age's "maturity" to the "childhood" of humanity he located in the ancient Near East.

What, though, made Mosaic Law the crowning moment of the ancient Orient? Drawing on the long Christian tradition of contending that Moses was "instructed in all the wisdom of the Egyptians" (Acts 7:22), Michaelis argued that his legislative wisdom was largely Egyptian in origin. For Michaelis, Moses's genius lay in superimposing Egyptian jurisprudence onto an ancient law that the Israelites had transmitted orally. Moses, he argues, borrowed nearly all of the key elements of Mosaic law from Egypt, introducing them in the face of significant opposition on the part of the "disobedient Israelites." Michaelis's challenge here is how to gain access to the ancient Israelite oral law that Moses allegedly "improved" and

^{8.} See Hess (2002), pp. 25-50, also Hess (1998), pp. 92-100.

^{9.} See on this question, Hess (2013).

^{10.} Löwenbrück's excellent monograph on Michaelis, in contrast, tends to stress deep continuities in Michaelis's thought that get expressed in a new vocabulary in the 1780s in the midst of the debates on Jewish emancipation (see Löwenbrück 1995).

^{11.} Michaelis (1770), Vol. 1, pp. 1-25.

^{12.} Michaelis (1770), Vol. 1, p. 6.

"invalidated" with his Egyptian-inspired legal code.¹³ Scripture, he concedes, offers few clues here. Luckily, however, the historian has other options:

Without assuming Moses's laws, I can find precisely this unwritten ancient law in those peoples who are most closely related to the Israelites, namely, Arabs. Their customs elucidate the ancient law Moses sought to amend. If we did not have these Arab customs, we would very rarely be able to elucidate the laws of Moses with reference to an older customary law. The ancient customs have been preserved in this people, who have been cut off from the world and who have seldom been brought under a foreign yoke. Indeed, when reading a description of the nomadic Arabs one believes to be in Abraham's hut. Travel descriptions of Arabia, and of neighbouring Syria, will be of much greater help for us than one might dare to think given the great distance of time at stake here.¹⁴

Nomadic Arabs have remained trapped in the state of childhood Michaelis saw as characteristic of the ancient Israelites. Travel descriptions of Arabs such as Niebuhr's can thus easily stand in for the work of the historian, giving modern Europeans access to that world they need to understand in order to gain dominance over their Oriental childhood. As a stagnant people unable to make steps toward "maturity," Arabs are of value to Michaelis solely as a window into the customs of the Israelites-an issue reinforced by his near total disregard of the way in which Islam, for one, might serve to disrupt this image of the absolute continuity of Arab life since Abraham's time. The Arabs appear here as a people outside of history who are of great historical value for modern Europeans: it is through Arabs that Christian Europe can have access

to the Israelite childhood it needs to recover and supersede on the path toward legal maturity.

For Michaelis, European intellectual hegemony over the Orient—whether ancient Israelites or modern Arabs—has nothing to do with power relations. Indeed, throughout his work, as mentioned earlier, he coordinates his search for intellectual authority with an explicit critique of imperial politics. It is telling here what he insists Moses found so exemplary in Egypt:

[The Egyptians sought a] great and powerful state without foreign trade, which they detested. ... Indeed, Egyptian politics aimed not at conquering foreign lands but at cultivating and making use of its own land. What ancient people do we know whose politics is more sublime than that of the Egyptians? ... If we only knew more of the highly developed legislative wisdom of this people, perhaps our modern politics could learn from it, as it too is concerned with cultivating the land and peacefully enlarging its power over its interiors. For those who are concerned with desolating other lands, of course, the ancient kings of Egypt are children compared to the Romans, who have bequeathed to us a perfect exemplar of the wisdom governing a predatory state. ¹⁵

Egypt here is not the nation that keeps Israel in slavery but the model for the peaceful expansion of domestic power, a politics of economic self-sufficiency Michaelis juxtaposes here to the Roman Empire, and elsewhere to the unhealthy obsession with international trade he sees as characteristic of contemporary British and French colonialism. ¹⁶ Unlike contemporary Arabs and the ancient Israelites, Egyptians appear not as "children" but as precocious adolescents with a "highly developed legislative wisdom" worthy of being imitated by modern Europeans.

Michaelis's model of Oriental Studies hinges thus on an explicit critique of imperialism. Clearly, he asserts European superiority over the Orient, but this hierarchical relationship is one of knowledge, not of power. So how do we reconcile this position with his

^{13.} Michaelis (1770), Vol. 1, pp. 10, 15, 46-47. As Assmann (1997) makes clear in *Moses the Egyptian: The Memory of Egypt in Western Monotheism*, the figure of Moses the Egyptian underwent a major revival in the late eighteenth century. Contemporaries of Michaelis such as Karl Leonhard Reinhold, Friedrich Schiller and Friedrich Heinrich Jacobi tended to undertake much more radical projects with this figure, invoking the Egyptian origins of Mosaic Judaism to challenge the rigid distinction between polytheism and monotheism.

^{14.} Michaelis (1770), Vol. 1, pp. 12-13.

^{15.} Michaelis (1770), Vol. 1, pp. 15-16.

^{16.} Michaelis, (1770) Vol. 1, pp. 238-242.

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fantastical suggestion of German colonies populated by Jewish slave labour? At one key moment in Mosaic Law, Michaelis's neat distinction between imperial power and Orientalist knowledge falls apart. In his effort to relegate Mosaic law to the childhood of humanity, Michaelis concedes that there are those in his midst for whom the laws of Moses are still considered to be binding:

I often do not know this [ancient Israelite customary law], and in such cases I take the liberty of indicating the lacuna myself--unlike those who claim to know everything and would fill such lacunae with fictions that pass as scholarly investigations, with Talmudic legends and Rabbinic decisions. ...The Talmud, which consists of oral traditions of somewhat ignorant Rabbis, can tell us much about the common law of the Jews at the time these men lived, not, however, about the meaning of Mosaic law. Indeed, Moses's laws would make a very strange figure if one were to understand them in the manner of the Pharisees, whose interpretation was, according to Christ's own pronouncement, often the direct opposite of that which Moses commanded... Anyone who believes to encounter a Talmudic Law here will be very much mistaken. I do not even deign to mention the names of those men whose sayings are collected in the Talmud, and I do not deal at all with the Rabbis. ... The Talmud is an impure source for studying Jewish law: a book that was written so late-and one that relies solely on oral traditions at that--can tell us nothing credible about the customs under the First Temple, certainly nothing about the age of Moses. 77

The Talmud, Michaelis insists, is useless for the historical study of ancient Judaism. As the product of "ignorant Rabbis," this collection of fictions and unreliable oral traditions is marred by its belatedness. Whereas Michaelis captures the spirit of Mosaic law, contemporary Jews lack a proper historical understanding of their Oriental origins. They often interpret Mosaic law as "the direct opposite of that which Moses commanded," perpetuating the sort of Judaism Jesus sought to destroy. Contemporary Jews constitute an anachronism, out of sync with modernity both in their adherence to an antiquated legal tradi-

Michaelis establishes his credentials as an Orientalist thus by degrading Jewish exegetical practices, invalidating the arguments and methods of Jewish exegesis with the authority of Jesus himself in such a way as to sever any and all connections between Judaism and Christianity. Arguments that Rabbinic Judaism corrupted the spirit of Mosaic law were nothing new in the eighteenth century.¹⁹ But Michaelis goes further here, presenting contemporary Jews as a dispersed group that fundamentally lacks a sense of its own history. Bound together by a network of Rabbinic perversions of Mosaic law, contemporary Jews are neither authentically Oriental nor European, neither trustworthy remnants of ancient Judaism nor connected to the modern world. Like the childlike Arabs, they too reside in a realm seemingly immune to historical progress, but they lack both the innocence and the geographical situatedness of Arabs, emerging instead as a group of shabby scholars lacking the acumen to understand Mosaic law historically.

Described in this manner, Jewish interpretive practices mark the antithesis of Michaelis's own scholarship, a grotesque alter ego to Mosaic Law, and it makes sense that he introduces these impassioned polemics against Jewish exegesis at such a key juncture in his work. The continued existence of Jews disrupts nearly all the distinctions central to his project-the differences between Orient and Occident, ancient

tion and in the ahistorical manner in which they interpret this tradition. For Michaelis, modern Arabs are the only legitimate descendants of the Israelites, and not surprisingly, in his autobiography, he comments that Niebuhr made one fatal error in his voyage. Without the advantage of having studied Hebrew with Michaelis, he failed to grasp "that in seeking to answer my questions one should not have made inquiries to Jews and Rabbis but only to native and fullblooded Arabs; for we in Europe know better what scholarly Jews say about many such things, and those Asian Jews who are scholars get their information from European Rabbis."18

^{18.} Michaelis (1793), pp. 74-75. 17. Michaelis (1770), Vol. 1, pp. 56-58.

^{19.} See here, for instance, Breuer (1996).

and modern, childhood and adulthood. In order for Michaelis to secure his intellectual authority over the Orient, he needs not merely to relegate Arabs to the position of Oriental children. Contemporary Jews, too, must be put in their proper place, yet given Mosaic Law's visions of Europe and the Orient, it is unclear what and where this place would be.

The Presence of the Oriental Past: Jewish Emancipation and the Challenges of Distinterestedness

Michaelis's vision of Oriental Studies hardly exemplifies the simple equation between discourse and empire, knowledge and power, that was the earmark of Edward Said's critique of Orientalism.20 For the most part, indeed, Michaelis was an anticolonial thinker, a supporter of disinterested scholarship who challenged the tide of European expansion. Colonial thinking erupts in his oeuvre only when it becomes difficult for him to sustain his vision of the apolitical production of historical knowledge. The voyage to Arabia itself, tellingly, ended up doing little to change the Göttingen professor's worldview. Whatever advances the expedition provoked in other realms of scholarship-and however transformative it was for Niebuhr - for Michaelis, the basic vision of the Orient as stagnant, childlike and immune to the progress characteristic of Europe was only perpetuated by the seven years of travel. The challenges to Michaelis's vision of Oriental Studies came not from the Near East but from the heterogeneity of his native land, from those displaced Asiatic refugees who continued to insist on the relevance of ancient Judaism for life in Diaspora-those "ignorant" Rabbis disrupting the natural flow of history from antiquity to modernity, from Judaism to Christianity, and from the Orient to the Occident. In his review of Moses Mendelssohn's Jerusalem in his Oriental and Exegetical Library in 1783, Michaelis took offence at the Jewish philosopher's argument that Jesus was an exemplar of the Rabbinic principle. Michaelis sought here, contra Mendelssohn, to reinstate the scenario he presented in his *Mosaic Law* of a clean break between Judaism and Christianity. What provoked Michaelis's anticolonial rhetoric to unravel in the midst of the debates on Jewish emancipation was precisely what he had been seeking to work against for the last two decades and precisely what Mendelssohn himself saw as normative for modernity: the presence of the Oriental past.

For all his objections to Jewish emancipation, Michaelis had no distinctly political agenda. He entered these political debates not just as a scholar but, more importantly, to defend his mode of scholarship. He resorted to colonial thinking to resolve difficulties in sustaining the worldview central to his vision of Oriental Studies, to contain the unthinkable possibility that the descendants of his ancient objects of study were alive, well and on the brink of acquiring rights for themselves in the modern world he himself inhabited. For all his fantasies of deporting Jews to the West Indies and his creative appropriation of emergent discourses on race, Michaelis was motivated as little by politics as he was by the type of racial anti-Semitism that came to prominence in the second half of the nineteenth century. His politics was largely a defensive one. He indulged in fantasies of colonial power over Jews only in order to maintain the hierarchies between East and West, Orient and Occident, antiquity and modernity, crucial to his own professional identity as a disinterested scholar of ancient Judaism. Michaelis's Orientalism became political thus not in an effort to secure power over the Near East, but in an effort to manage the potential threat that Jews themselves posed to Orientalist discourse on the domestic front. To Niebuhr, who had the poor judgment to consult with Jews on matters concerning Judaism during his voyage, this may not have been an issue. But for a scholar of ancient Judaism keen on using scientific expeditions to the modern Near East as a substitute for time travel to the ancient Orient, Jews necessarily got in the way. It is thus no surprise that the radical proposals of a young Prussian civil servant to grant rights unconditionally to these Asi-

^{20.} Said (1979).

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atic refugees proved extremely unsettling, a fundamental challenge to his scholarly ethos that demanded a rapid response in the pages of his *Oriental and Exegetical Library*.

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Niebuhr's Method

Michael Harbsmeier

Abstract

If fieldwork can be defined as the practice of following or trying to follow the advice and instructions issued in advance by scholarly and scientific authorities Niebuhr deserves a special place indeed in the history of that practice. This paper presents a closer look at Niebuhr's method from three different angels of comparison: starting with some of his predecessors it will try to shed light on the originality of his approach. Turning to some of Niebuhr's critical portrayals of other travellers he met in the field it will guide us to Niebuhr's own understanding of his method. And finally turning to how later scholars have praised and evaluated Niebuhr's contributions to scholarship it will lead to a discussion of how the role of fieldwork has been underestimated and even silenced in many histories of scholarship and science.

I. Damascus

Writing about his arrival in Damascus 23rd of August 1766 Carsten Niebuhr could not resist the temptation to compare himself to the prophet Mohammed, who, having come to overlook the city from the very same spot as Niebuhr, reportedly decided to stop his journey because, as the prophet is quoted to say, "man should only enter Paradise once." A European painter, Niebuhr continues to explain probably would have preferred a different prospect of the city showing more than the flat roofs of the houses in a forest of domes and minarets. The surrounding and well inhabited plains, however, are highly delightful, particularly for an Arab from desert. "The water here" Niebuhr continues,

is excellent, and since the Arabs drink nothing but water and also frequently go bathing, Mohammed knew to appreciate the amount and quality of the water better than most Europeans, who never drink water and perhaps never take a bath in their life. Furthermore,

Mohammed here found an abundance of prime wheat instead of the Durra-bread most Arabs have to content themselves with, and also the most delicate fruit trees in large numbers which rich inhabitants of Mekka can get no better from Taiif. He thus had good reason to call Damascus a paradise. Myself, I was very pleasantly surprised when, coming from a mountainous and drought affected area and standing perhaps on the same spot as Mohammed, I caught the sight of the city to the East on a morning with excellent weather.²

Even though Niebuhr only spent three days in Damascus to make his observations and take and count the steps necessary for making the map,³ which was printed in the second volume of his *Reisebeschreibung* already, he clearly had the ambition to describe Damascus and its surroundings from what more than a century later famously was called the native point of view. The final goal of the ethnographer, declared Bronislaw Malinowski in a much quoted passage of the introduction to his *Argonauts of the Western Pacific*

^{2.} Niebuhr (1837), p. 84.

^{3.} Fig. 1.

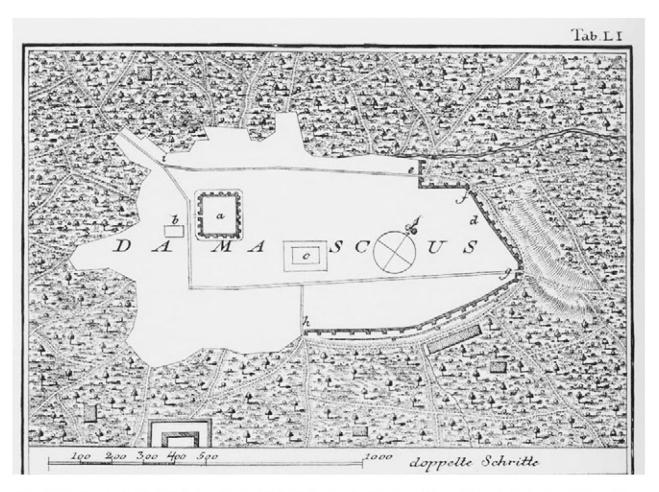


Fig. 1. Damascus. a. das Castell. b. Das Seroj oder die Wohnung des Pascha. c. Haupt-Mosqué. d. das Quartier wo die meisten Christen wohnen. ... h. Bab Schauer. Niebuhr (1778), p. 408, Tab. LI.

from 1922, is "to grasp the native's point of view, his relation to life, to realize his vision of his world".⁴ In what follows I want to discuss in what sense one can say that Carsten Niebuhr actually developed a method for doing ethnographic fieldwork long before this method came to be canonised in what for this reason came to be known as *modern* anthropology.

Due to the corrupt Ottoman authorities and their humiliatingly excessive demands (alluded to in a manner reminding of Clifford Geertz and the police during the Balinese cockfight),⁵ Niebuhr only spent three days

in Damascus before going back to the Lebanese mountains with, as he says, a small company of peasants, hardly enough to deserve to be called fieldwork in any sense of the term. Spending almost seven years in the field, however, and doing so with the explicit intention to view the world from not only the prophet Mohammed's, but actually many different native points of view, Niebuhr can be claimed actually to have done fieldwork in the strict sense of the word (to quote the title from another of Malinowski's books). Or this at least is what I will to try to show in what follows.

^{4.} Malinowski (1922), p. 25.

^{5.} Geertz (1973).

^{6.} Malinowski (1967).

II. Precursors

If we define fieldwork as so many ways of practicing instructions and answering questions which have been issued by academies and other scientific and scholarly institutions and individuals, then we can add at least a couple of centuries to the history of fieldwork as it has been told again and again by nearly all the textbooks of anthropology. This history started, one could say, around the time of the "crisis of the European conscience 1680-1715" described so eloquently by Paul Hazard.⁷

Robert Boyle's General Heads for the Natural History of a Country, great or small, drawn out for the use of travelers and navigators from 1666,8 the unpublished instructions for the astronomical French expedition to Gorée and the Antilles 1681-1683 by the Académie Royale des Sciences in Paris studied by Nicholas Dew9 or John Woodward's Brief Instructions for Making Observations in all Parts of the World: as also for Collecting, Preserving, and Sending over Natural Things. Being an Attempt to settle an Universal Correspondence for the Advancement of Knowledge both Natural and Civilio from 1696 are among the earliest examples of this new genre of instructions and questionnaires which developed further throughout the 18th and 19th centuries in both England, France, Italy and Germany and which has thoroughly scrutinized in a whole series of recent studies." As with Boyle and Woodward, most of the earlier texts indicate that fieldwork to begin with aimed at various aspects of natural history, at what later was to differentiate into botany and zoology, geography and mineralogy, geology and astronomy etc. They also point at a new kind of relationships and forms of exchange between the theoretically interest-

7. Hazard (1935); see also Harbsmeier (2012) for a slightly more extended version.

ed academies and their members on the one hand and the practitioners of their instructions out there on the other.

A striking example of how precisely such instructions actually did have effect can be found in Captain Robert Knox's Historical Relation of the Island Ceylon in the East Indies from 1681.12 Robert Knox was sailing with his father to Persia in the service of the East India Company, but a storm forced them to get ashore on the island of Ceylon, modern Sri Lanka, in 1659. Here they were held captive for the next 19 years; his father having escaped in 1661, Robert Knox managed to return home via Batavia to London in 1680. When trying to write about his long stay on Ceylon, Knox seems to have worked closely together with Robert Hooke, the well-known curator of experiments of the Royal Society. And it is from Hooke's preface to Knox book that we are informed about the significance and importance of the instructions issued by this society for the coming into existence of the kind of scholarly and learned travel accounts such as that of Captain Robert Knox. Beginning with a complaint about the many discoveries which in spite of the invention of writing and the art of printing "have been lost, to the great Detriment of the Publick", Hooke continues:

It were very desirable therefore that the Causes of these and other Defects being known, some Remedies might be found to prevent the like Losses for the future. The principal Causes I conceive may be these; The want of sufficient Instructions (to Seamen and Travellers) to shew them what is pertinent and considerable, to be observ'd in their Voyages and Abodes, and how to make their Observations and keep Registers or Accounts of them. Next, The want of some Publick Incouragement for such as shall perform such Instructions. Thirdly, The want of fit Persons both to Promote and Disperse such Instructions to Persons fitted to engage, and careful to Collect Returns; and Compose them into Histories.¹³

^{8.} Collini & Vannoni (2005), p. 61-69.

^{9.} Dew (2010), p. 6.

^{10.} Woodward (1696); see also Collini & Vannoni (2005), p. 71-75.

II. Blanckaert (1996); Bossi and Greppi (2005); Bucher (2002, 2003); Chappey (2002); Collini and Vannoni (2005), Copans and Jamin (1978); Kury (2001), p. 91-146; Stagl (1995); Puccini (1995); Rubiès (1996); Urry (1973); Vaccari (2007).

^{12.} Knox (1681); see Rubies (1996), p. 139-141, and, more recently and in much more detail, Winterbottom (2009). 13. Knox (1681), Preface.

The main result of Hooke's active participation in the preparation of the text of Knox's account of Ceylon probably has been the very structure of the account: rather than a narrative of the captain's voyage and captivity, it has the form of a systematic description of Ceylon and its inhabitants starting with "A General Description of the Island, a chapter Concerning the chief Cities and Towns of this Island, a third Of their Corn, with their manner of Husbandry, a fourth Of their Fruits and Trees, a fifth Of their Plants, Herbs, Flowers, a sixth Of their Beasts Tame and Wild, Insects, and a seventh Of their Birds, Fish, Serpents, and Commodities" as the first part mainly devoted to natural history. The second part then deals with the present "King of Cande, his Manner, Vices, Recreation, Religion, and his Tyrannical Reign, his Revenues and Treasure, his great Officers, his Strength and Wars" and finally "A Relation of the Rebellion made against the King as a second part followed by a third devoted to various aspects of the ethnography of the Inhabitants of this Island, their different Honours, Ranks, and Qualities, their Religion, Gods, Temples, Priests, their Worship and Festivals, their Religious Doctrines, Opinions and Practices, their Houses, Diet, Housewifery, Salutation, Apparel, their Lodging, Bedding, Whoredome, Marriages, Children, their Employments and Recreations, their Lawes and Language, their Learning, Astronomy and Art Magick" and finally their "Sickness, Death and Burial." It is thus only towards the end of the book, in the final part after the exhaustive parts devoted to natural history, what later would be called politics and ethnography respectively, that we come to a narrative about how the author happened to get there, how he survived his captivity and how he finally escaped to return home again.

The cooperation between Knox and Hooke certainly was decisive for the shape of Knox's Historical Relation, the instructions however, which Hooke deemed so deeply important, entered into the process *post festum*: not as instructions for how to act and behave out there in field, but as instructions only for how to organize and write up the experiences and observations thereafter. Knox's Historical Relation was

perhaps one of the earliest scholarly ethnographies; it was not yet based on fieldwork however. In December 1689, Robert Hooke gave an address to the Royal Society in which he in which he provided what was the first detailed description of cannabis in English, commending its possible curative properties and noting that Knox "has so often experimented it himself, that there is no Cause of Fear, tho' possibly there may be of Laughter." Knox's experiments with cannabis were not yet part of fieldwork; the Ceylonese with whom he interacted only became his informants after he returned from the field.

The case of Robert Knox was far from the only example we have of instructions mainly being used in the context of debriefing and interrogating travellers once they had returned rather than preparing them for their voyage in advance. Much the same could be said, among examples from Germany only, about the cooperation between for example Hans Staden¹⁵ and Johannes Dryander¹⁶ in the sixteenth century or between the learned traveller Adam Olearius and the travellers whose accounts he edited later in the seventeenth century.¹⁷

From the middle of the eighteenth century onwards, however, we can see a growing the emergence of a whole series travellers, who actually both did author and issue the instructions which they themselves had followed or planned to follow in future expeditions.

Peter Simon Pallas for example, who in 1767 was invited by Catherine II of Russia to became a professor at the St Petersburg Academy, between 1768 and 1774 led an expedition to central Russian provinces and West Siberia, Altay and Transbaikal collecting natural history specimens. The regular reports which Pallas sent to St. Petersburg were collected together and published as *Reise durch verschiedene Provinzen des Russischen Reichs* [Journey through various provinces of the

^{14.} Bennet (2003), pp. 205-206.

^{15.} Harbsmeier and Whitehead(2008).

^{16.} Harbsmeier (2008).

^{17.} Mandelslo (1658); Andersen and Iversen (1669).

Russian Empire],¹⁸ where he covered a wide range of topics, including geology, mineralogy, botany and zoology in addition to substantial reports on the native peoples and their religion. Nine years later, he published his instructions for another traveller: *Instructions pour M. Patrin, naturaliste, à qui est enjoint d'accompagner l'expedition destinée pour la Kovima et la mère glaciale*,¹⁹ and as if to follow up on his instructions, between 1793 and 1794 he led a second expedition to southern Russia, visiting the Crimea and the Black Sea, of which he gave an account in his *Bemerkungen auf einer Reise in die Südlichen Statthalterschaften des Russischen Reichs*.²⁰

Another obvious example is the Venetian naturalist and traveller Alberto Fortis who has described his field methods in great detail in his Preliminary notes deemed necessary to serve as directions for travels aiming at illustrating the natural history and the geography of provinces adjacent to the Adriatic and particularly Istria, Morlacchia, Dalmazia, Albania and connected islands published in Venice [Venetia] in 1771, 21 and whose European fame derives from his Viaggio in Dalmazia published in two volumes three years later.22 Immediately translated into both German, French and English, it was his detailed ethnographic account of the Morlacchi, a pastoral people living in mountains of Dalmatia close to the Adriatic coast, which according to Larry Wolff qualifies as "a pioneering effort in the emergence of modern anthropology":

On the one hand, Fortis was fully versed in the philosophical writings of Rousseau, and familiar with the model of the noble savage, which shaped the account of the Morlacchi. On the other hand, unlike Rousseau, Fortis was committed to the labour of empirical observation, both as a natural historian and as a witness of customs, so that his philosophical reflections were applied to carefully observed phenomena. Montesquieu created Persians but never went to Persia. Rousseau

conjured the noble figure of the savage Carib but never came close to the Caribbean. Fortis's account of the Morlacchi, however, was based on something like modern anthropological field research, and the Morlacchi of Dalmatia were accessible to his observations, because they were to be found just across the Adriatic Sea from Padua and Venice.²³

One could probably find still other examples for the coincidence between the roles of scholar and of traveller, which may be said to lay at the foundation of fieldwork, but here it must be enough also to mention Johann Reinhold Forster, who in his youth went to Russia in hope of a career as scholar and explorer, and later became famous as participant, together with his son Georg, of Cook's second voyage from 1772 to 1775. Forster's A catalogue of the animals of North America ... to which are added short directions for collecting, preserving and transporting all kinds of natural history curiosities came out in London 1771.24 In 1778 he published his own Observations made during a Voyage round the World which in addition to a series of chapters about various aspects of natural history he develops, as Nicholas Thomas has argued, a complete comparative ethnology of the inhabitants of the various islands in the South Pacific.25 Fieldwork once again turns out to have been practiced by scholars, who at the same time nourished theoretical and comparative ambitions.

Looking at this already long series of early examples of fieldwork brings to the forefront a very important further aspect of fieldwork, all too long absent from much of the secondary literature about early scientific travels, and that is the crucial role of the travellers' hosts and informants. Making this aspect part of the very definition of fieldwork as a practice of executing the instructions issued by primarily scholarly and scientific agencies directs our attention towards what I would like to call the intrinsically "ethnographic" nature of fieldwork. What all the example quoted so far have in common is a combined interest in natural history on the one and what we can call antiquarian or

^{18.} Pallas (1771-1776).

^{19.} Extracts in Collini & Vannoni (2005), pp. 139-143)

^{20.} Pallas (1799-1801) - for more see Collini (1995).

^{21.} Extracts in French translation in Collini & Vannoni (2005),

pp. 85-93, see also Ciancio (1995).

^{22.} Fortis (1774; 1778).

^{23.} Wolff (2005), p. 5.

^{24.} Forster (1771).

^{25.} Forster (1778); Thomas (1996).

ethnographic issues, questions about local and native knowledge and traditions on the other. It is exactly this constellation which made fieldwork into a mode interacting with the inhabitants of the field both as informants and as objects of observation, both as hosts with whom to share knowledge (and necessities) and as individuals and populations to be described and written and reported about. In this very general sense, then, Malinowski was right when describing fieldwork as both participation and observation – as both sharing and extracting knowledge, as both interaction and dissociation.

Travelling through Japan as a member of a delegation of the Vereenigde Oost-Indische Compagnie 1690-92, Kaempfer managed to use a number of interpreters as his informants not only when botanising, but more importantly also when pretending to botanise while actually pursuing the many different investigations which finally went into his monumental Geschichte und Beschreibung von Japan (first published posthumously in two volumes in German 1777-1779)26 and which show Kaempfer as a virtuoso in making use of local and native informants. Kaempfer does very explicitly acknowledge his debt to his informants explicitly and we can only speculate whether he did so trying to protect his informants against their according to Kaempfer vigilant superiors. Thanks to recent archival studies, however, we now know a great deal more about the interpreters Imamura Genemon Eisei, Namura Gonpachi, Narabayashi Chinzan and others, with whom Kaempfer shared and exchanged knowledge and information in natural history and a lot of other disciplines.²⁷ Published in an English translation by J. G. Scheuchzer in 1727 in London, the very title of Kaempfer's work clearly indicates that we have to do with a monograph fundamentally based on fieldwork in the sense of - in this case self-instructed - practices of sharing and exchanging substantial bodies of knowledge and information with native informants:28 Kaempfer could only give "an Account of the ancient

and present State and Government of that Empire; of Its Temples, Palaces, Castles and other Buildings; of its Metals, Minerals, Trees, Plants, Animals, Birds and Fishes; of The Chronology and Succession of the Emperors, Ecclesiastical and Secular; of The Original Descent, Religions, Customs, and Manufactures of the Natives, and of their Trade and Commerce with the Dutch and Chinese" – on the basis of extensively having practiced fieldwork.

Much better known among historians of science and of anthropology than the examples quoted so far are three other instructions for travellers from the second half of the eighteenth century, however. Quite a lot has been written already about Carl Linnaeus and the influential *Instructio Peregrinatoris* from 1759 ascribed to him and about Joseph-Marie de Gérando and his *Considérations sur les diverses méthodes à suivre dans l'observation des peuples sauvages* from the year 1800.²⁹

Common to both of them is firstly, that their authors were not themselves among the travellers their instructions were meant for. Linnaeus was famous for his many botanical expeditions in Sweden undertaken both before and after the inaugural address he gave about "the necessity of travelling in one's own home country" when, shortly after returning from his tour to the Netherlands, England and France, he was appointed as professor in medicine in Uppsala in 1741. His *Instructio Peregrinatoris* from 1759, however, was obviously meant for the long series of his students who went to all the four continents while Linnaeus never left Sweden again.³⁰ Nor did the *idéologue* Joseph-Marie De Gérando have any intention to join the expedition for which he wrote the instructions.

Secondly, however, much more needs to be done in order to find out how these instructions actually have been practiced by some of their readers. De Gérandos instructions apparently had no effect on the Australian expedition they were meant for. More could be learned about the history of fieldwork by taking a broader look at some of trav-

^{26.} Kaempfer (1777-1779).

^{27.} For details see Michel (2001), pp. 76-88.

^{28.} Kaempfer (1727).

^{29.} de Gérando, (1800).

^{30.} For the original Latin text, see Linnaeus (1759), and for a translation into Swedish, Fries (1906), pp. 195-213.

ellers under the influence of the group of idéologues such as for example Constantin François de Volney, who himself published a series of Questions de statistique de statistique à l'usage des voyageurs in 1795, few years after his Voyage en Egypte et en Syrie (published 1787),31 and shortly before he went to the United States. His Tableau du climat et du sol des Etats-Unis from 180332 actually contains an appendix about the American Indians which according to Moravia can be interpreted as an attempt to practice the instructions of De Gérando.33 And, as Siegfried Huigen recently has suggested, one also should have a closer look at Lodewyk Alberti's monograph from 1810 about De Kaffers aan de Zuidkust van Afrika, Natuur- en Geschieedkundig beschreven, which Huigens proclaims to be "the only practical application of the ethnographic questionnaire" of De Gérando.34

If we define fieldwork with Clifford Geertz as "going out to places, coming back with information about how people live there, and making that information available to the professional community in practical form", Linnaeus certainly also was one of its practitioners among the Sami, as Zorgdrager recently has argued.35 Much more interestingly, however, one also should take a closer look at the field practices of some of the Linnaean apostles such as for example Anders Sparrmann and his ethnography of the Khoikhoi.36 Or Peter Forsskål - and thus we finally come to what this paper should be all about, the case of Peter Forsskål and Carsten Niebuhr, and how they dealt in the field with the instructions and questions for the "Company of learned men" (Gesellschaft gelehrter Männer) sent off to Arabia Felix and adjacent countries for money of the King of Denmark in 1761.

III. "A company of learned men"

Johann David Michaelis's almost five hundred pages of "Questions for a Company of learned men, who travel to Arabia on command of the His Majesty the King of Denmark" (Fragen an eine Gesellschaft gelehrter Männer, die auf Befehl Ihro Majestät des Königes von Dännemark nach Arabien reisen), which were published in Frankfurt in 1762 (and in French translation in Paris immediately thereafter) and only came into the hands of Carsten Niebuhr in Bombay after the company had left Arabia and the other young learned men had passed away, can be seen as one of the first and most systematic attempts of linking together antiquarian interests with questions of natural history.

Michael not only reprinted almost completely the written instructions authorized by the king,³⁷ but also exactly one hundred questions formulated by Michaelis himself, who, having announced the Danish expedition in advance through various learned journals, had received a number of suggestions from colleagues in all parts of Europe and had also discussed his questions with a number of colleagues in Göttingen through a series of private seminars.

Urging all the participants to make as many "discoveries for scholarship" (Instr. §1) as possible and giving detailed advice on their mutual cooperation (which as we know turned out extremely problematic), the Instructions proper not only put special stress on the necessity of daily training in the Arabic language on board the ship (Instr. §4), but even more emphatically request every member of the expedition to keep his own diary with daily entries and in a way completely comprehensible to anyone in case death should prevent them from interpreting their notes themselves (Instr. §8). Von Haven, Forsskål and Niebuhr moreover are asked to read their diaries for each other from time to time in order to remove misunderstandings but without requiring consent. At regular intervals, copies of these diaries should be sent to Europe to ensure their preservation (Instr. §9). Asking

^{31.} Volney (1787).

^{32.} Volney (1795).

^{33.} Volney (1803), reproduced in Moravia (1970), pp. 397-439.

^{34.} Huigens (2009), p. 192.

^{35.} Zorgdrager (2009) - himself quoting Geertz.

^{36.} Sparrmann (1783-1818).

³⁷. Michaelis (1762), c4v-e3v. In the following is referred to the paragraphs of the Instruction as reprinted by Michaelis.

all members to show politeness and civility when dealing with the Oriental authorities, the instructions furthermore specify the duties of each participant in turn. Copying inscriptions was the task of the Danish member of the expedition, the philologist von Haven. In this case, however, and especially when dealing with yet undecipherable inscriptions, all the members of the expedition are urged to take part in the effort (Instr. § 42-43).

Michaelis himself seems to have been less concerned with inscriptions than with the Old Testament. His one hundred questions mostly deal with medical issues, with all sorts of disease and bodily disorders; with natural history and innumerable species of plants, animals and other natural phenomena; and with a few Oriental habits and customs. All of this, however, was closely related to his fundamental interest in explaining the Bible.

Michaelis admits that this exclusive concern with questions raised by reading and translating the Holy Scripture might seem inappropriate and excessively theological. According to Michaelis, however, the Bible deserves such scrutiny not only as the basis for "all our religion," but also by forcing upon us all kinds of problems of natural history and ethnography.

Nearly three hundred names from the realm of plants, and I don't know how many from the realm of animals, and a lot of names of precious stones are found in the Old Testament, which moreover is completely interwoven with the customs of the Orientals and geography.³⁸

Starting out from the Old Testament implied an important twist to the kind of natural history Michaelis advocated. Philology actually enters into his kind of natural history much more than in other questionnaires and travel-instructions of the eighteenth century. Rather than directly addressing questions of geography, astronomy, botany, zoology and medicine, Michaelis wanted his expedition to engage in what today would be called ethno-medicine, ethno-botany, ethno-zoology etc. The list of birds for example, dealt with through fifty pages in the final question number

roo, only treats what he calls "unclean" and "forbidden" specimens. To Michaelis, the Bible and especially the Old Testament served as the looking-glass through which he was able to confront the issues that other contemporary authors of questionnaires and instructions for scientific expeditions, such as for example Volney, confronted directly. And with this have a first explanation of the originality of the philologically motivated fieldwork in natural history practiced by Peter Forsskål and Carsten Niebuhr.

Taking a closer look at how Niebuhr actually dealt with the book of instruction he received when actually it was too late in more than one sense of the term, leads us to a second important peculiarity of Niebuhr's fieldwork and his method.

"It was first after the demise of my friends", Niebuhr explains in the first of the books he published after his return to Copenhagen, the *Beschreibung von Arabien*,

that I began to make records about the way of life of the Arabs and the habits and customs among them. Before that I trusted the two oldest among them in this, mainly because I found that many other travellers already had noticed a lot about them. Now I wish that I had started immediately to make records of all the ways in which the habits of the Orientals are different from those of the Europeans. I was later so accustomed to their way of life, that I definitely would not have noticed those conditions as exceptional which for a newly arrived European would have been very strange.³⁹

In this passage, Niebuhr not only openly admits not to have followed neither the Royal instructions nor those of professor Michaelis. He secondly confesses that he only started thinking and writing about the strange habits and customs of the Arab at a moment when he had become so familiar with these habits and customs that they no longer were neither strange nor exceptional from his point of view. Due to the tragic death of his friends, Niebuhr was forced to do the opposite of what most contemporary travellers with an interest in both natural history and antiquarianism: writing about what had become familiar to him dur-

^{38.} Michaelis (1762), 67v-b8r.

^{39.} Niebuhr (1772), p. XVII.

ing his fieldwork for an audience for whom it was both exceptional and strange. In his *Description of Arabia* from 1772, Niebuhr tried his best to live to up the expectations for things strange and exceptional nourished by Michaelis. In the subsequent three volumes of his *Reisebeschreibung*,⁴⁰ he actually to a much larger extent lets us and his readers share his familiarity with what thus no longer seems strange and exceptional.

A further particularity of Niebuhr's method of fieldwork also is closely connected to the tragic fate of his learned young friends. "It is a mistake to assume", Niebuhr explains

that my travel companions were carried off by infective diseases because they died so fast one after the other. I rather believe, that we ourselves have been responsible for our illnesses and that others therefore easily can take care to avoid them. Our company was too large to bring ourselves in time to live in accordance with the land. For several months, we couldn't get any drinkable strong drinks, such as we had been used to, but nevertheless we continued to have meat meals all the time, which in hot countries are seen as very unhealthy. After a hot day, we appreciated the cold evening air so well that we exposed ourselves too much to it. And we should also have paid more attention to the perceptible difference of temperature in the plains and mountainous regions. We hurried too much to get to know the interior parts of the country. ... And we often wrongly thought to have reason to complain without remembering that one doesn't always travel with pleasure in Europe either. For my own part, I often have been very sick while my co-travellers still were alive because I wanted like them to live in the European way. But after I only was surrounded by Orientals and had learnt how to take care of oneself in these countries, I travelled in Persia and from Basra over land all the way to Copenhagen in splendid health and without having much trouble with the inhabitants in these countries. 41

While at this point, in the introduction to his first book, blaming the whole company for not adapting properly to local conditions, Niebuhr actually praises his comrade Peter Forsskål precisely for this: for having taught him how to travel with ease and pleasure when they, during what seems to have been the happiest stage of the expedition, went botanising together in the mountains of Arabia Felix. "We deplored the loss of him very much", Niebuhr writes at the occasion of Forsskål's death,

because due to his close interaction with common people during his busy botanising, he not only was the best in our company to learn the Arabic language and its various dialects and therefore often was our spokesman, but furthermore also more generally took care that our voyage should continue in a favourable way. He was born for an Arabian voyage. He didn't easly get dissatisfied even when things turned uncomfortable. He accustomed himself to live the same way as the inhabitants of the country, which is a preconditon for travelling with profit and pleasure in Arabia. If not, even the most learned will be unable to make many discoveries in these countries.⁴²

It was when botanising with his still living friend Forsskål on their donkeys through the mountains of Yemen, that Niebuhr discovered his proper way and method of fieldwork. Freely changing both name, habits, clothes, appearance and identity to adapt to the changing circumstances, Niebuhr was able to interact productively with who exactly from merely having been his hosts became his informants.

Niebuhr discovered and developed his method of fieldwork not through merely answering the questions and following the instructions of scholarly and scientific authorities such as Michaelis, but on the contrary by learning from Forsskål and then acting on his own. There was one of the royal instructions which he never failed to follow: almost every single day during all the seven years of his voyage he made sure exactly to know his actual standpoint in terms of both longitude and altitude.

IV. Other travellers

Niebuhr's self-understanding as a traveller in the service of science not only finds its expression in the ac-

^{40.} Niebuhr (1774, 1778, 1837).

^{41.} Niebuhr (1772), pp. IX-X.

^{42.} Niebuhr (1774), p. 404.

count of his own travels, but also shines through in his portraits of some of the other Europeans whom he met on his way. Most of them appear to have caught his attention as a warning about what one should take care to avoid thus shedding further light on Niebuhr's understanding of his own approach.

The closest parallel to the Danish Arabian journey certainly was the expedition which Carlo Emmanuele III, king of Sardinia, sent to Egypt in 1760, only one year before the departure of the Danish ship from the harbour of Copenhagen. Also this Italian expedition had ambitions in both antiquarian studies and natural history therefore consisting of a whole group of scholars led by Vitaliano Donati (1717-1762), who had earned some fame for his Della storia naturale marina dell'Adriatico from 1745 and was professor of botany and natural history at the university of Torino from 1750.43 Also Vitaliano Donati had to continue the expedition alone after the other participants had been called home because of the serious conflicts and disagreements among them. On his way to India Donati falls ill and only three days before his ships arrival at the Malabarian coast he dies without a chance for sending home the results of his observations.

Carsten Niebuhr obviously sees the almost one generation older Donati as a model. Relating how Donati remained completely undisturbed by the approaching gang of armed and horse-riding robbers while drawing ruins at the banks of the Nile, Niebuhr tells us that he took no notice at all of the warnings of his companions by which the approaching Arabs were so astonished that they descended from their horses to take a closer look at this imperturbable man. Admitting that this story perhaps was slightly exaggerated Niebuhr makes no secret of his admiration for the dedication and perseverance of his Italian colleague.44 When few pages later writing about the death of Cramer, the last of his companions, he cannot avoid comparing his own situation to that of Donati:

Niebuhr's identification with the learned Donati is almost complete, and he concludes with repudiating rumours according to which the learned Italian should have continued to Persia with the entrusted funds to become a Muslim there.

In other cases, however, Niebuhr actually passes on similar rumours. The unhappy learned Frenchman for example, whose name perhaps was Simon, asked to become a Muslim and to get circumcised after desperately having tried to avoid the company of first his fellow countrymen in Aleppo and later that of the constantly quarrelling Capucin monks. Niebuhr shows empathy in his account of how the Arabs thereafter were willing to appreciate his medical expertise, but despised him for having betrayed his fatherland and his religion. But Niebuhr also points out that this Frenchman "not always was in command of his mind" and that is was in such an unhappy moment that he decided to become a Muslim.46 Niebuhr too tried to live and travel like the Orientals themselves, but he never considered to let himself circumcise.

A similar distance as well as identification shines through in a third of Niebuhr's biographical sketches, this time of a Swedish Oriental traveller, who also had lost his religious orientation on his way. "The mentioned Swede called himself Wilhelm Ross and had been preacher in Åbo in Finland", Niebuhr tells us in a passage in the third, posthumous volume of his

Thus I was the only one left of the whole company which the King of Denmark had sent to Arabia. But I hope, that these examples neither will deter the monarchs from continuing to support such travels nor the learned from undertaking them. If Donati hadn't hurried up so much to come to India; if we all had observed more caution to avoid cold and more generally from the beginning had taken care to live the same way as the Orientals; and if the various members of the companies had had more trust in one another and avoided making the voyage so unpleasant for one another through mistrust and quarrels, then perhaps we all would have happily returned to Europe. 45

^{43.} Donati (1745).

^{44.} Niebuhr (1774), p. 453.

^{45.} Niebuhr (1774), p. 455.

^{46.} Niebuhr (1774), pp. 455-457.

Travels, which also deserves to be quoted since it is, so far as I know at least, the only evidence of Niebuhr command of the Danish (and through that also the Swedish) language:

I saw this unfortunate man after I had returned back to Aleppo in the house of the French consul. Upon my addressing him in Danish he turned pale and as if into stone; he stared at my face stiffly without uttering a word until finally and in French he excused himself for being unable to answer me; he thought that I had spoken to him in his mother tongue, and that had been so much of a surprise for him that he was unable to hide his astonishment. He asked if he I could tell if I was a Swede? When he heard who I was, and assumed that I already knew his whole story, he apologised immediately for his change of religion eagerly assuring me that this had happened out of distress and that he would return to his dear fatherland as soon as he had satisfied his wish to have seen Jerusalem.⁴⁷

Although Niebuhr furthermore tells us that he never saw this Swede again, but only heard about him in Jaffa and from Frenchmen in other cities of the Levant, there is no doubt that Niebuhr was deeply fascinated and at the same time repelled by his story. Wilhelm Ross, who had come from France to Smyrna with almost no money, according to Niebuhr generally preferred the company of the poor rather than of the distinguished, that of the Orientals rather than of the Europeans, that of the Jews rather than of the Christians, that of the Catholics rather than that of protestants like himself, all of which made it increasingly difficult for him to reach the destination he was longing for, namely Jerusalem. Back in Aleppo and converted to Catholicism in order to take advantage of the monks' medical assistance he settled with the servants of the French consul, but continues to avoid Europeans, to stay away from mass and to seek the daily company of the Muslims, the Oriental Christians and the Jews. And when a French merchant should come by to ask questions he would soon be chased away by the smoke of the Swede's extraordinarily strong tobacco.

Expressing empathetic feelings also in this case, Niebuhr wishes that "this victim of a surely innocent fanaticism (*Schwärmerei*) ... deserves a better fate" since, "if he had been lucky enough to return back to his fatherland, he probably could have given us important intelligence about the common languages of the New Greek, the Muslims and the Jews". In the eyes of Niebuhr Wilhelm Ross also practiced a kind of scholarly fieldwork. He taught himself various languages, but instead of constantly keeping in mind his precise position in terms of latitude and longitude he let himself drive along and around by his longing for Jerusalem. Both travellers managed to get close to the point of view of others, but their standpoints were not the same.

Yet another of the Oriental Europeans portrayed by Niebuhr, Lord Edward Wortley Montagu, son of Mary Wortley Montagu, famous for her Letters from a Turkish Embassy, likewise was in search of a new standpoint. When at first coming back to Venice with a long beard and in Oriental dress, he was asked by another Englishman "how he possibly could enjoy to swarm round Turks and completely dress like an Oriental". His answer was, that when he told his father that he wanted to become a writer his father turned so displeased with him that he reduced his inheritance to merely 500 pound sterling yearly. At home in Europe he could not keep himself befitting his rank for so little money:

To live as a wretched in my fatherland didn't please me; therefore I chose the Orient, where even with 500 pounds a year I can live among the most respected of the country because one there from me as a Christian does not expect the same level of expenditure as my previous acquaintances would have demanded.⁴⁸

Quite the opposite of Niebuhr, Lord Montagu travels to the Orient to move among the most respected; and once arrived in Alexandria, he first of all is preoccupied with the young widow of en Italian merchant, whom he in the end also gets married to. Niebuhr's longwinded story about the many complications de-

^{47.} Niebuhr (1837), p. 39.

^{48.} Niebuhr (1837), p. 29.

riving from among many other circumstances the fact, that the Italian merchant turns out still to be alive as well as from a whole series of more or less dramatic changes in religious and confessional affiliations completes the picture of yet another traveller almost habitually changing dress, language, religious affiliation and identity, but without, like Niebuhr himself, constantly keeping track of their precise, if moving standpoint and position in longitude and altitude not only in the literal sense of these terms.

Only one of Oriental travellers portrayed by Niebuhr was given the chance to contribute a whole chapter to Niebuhr's *Reisebeschreibung* with details about various routes in Yemen, which Niebuhr had no possibility to measure himself.⁴⁹ Referring to this informant of Dutch origin not by his name, but only his initials, Niebuhr nevertheless spends several pages on the story of his life in portrait, which even more than the preceding ones can serve as a counter-image of the biographer himself and which already is found in his Description of Arabia from 1772. "DWHR" was a renegade, Niebuhr tells us when introducing this crucial informant in a passage like so many others completely left out in Heron's translation,

he was born from respectable parents on the island of Ceylon but got his education in Holland. His family had then sent him back to India and provided him with excellent recommendations and here the Dutch merchants had put him on a ship to Mokka under the command of a Muslim Indian captain, with whom he quarrelled a lot during the journey. In Mokka, he met a Dutch renegade, a tailor by profession. He began to see his daughter and even though he could not a speak one word to her since she knew no other language than Arabic he fell so much in love with her after a short while that he wanted to marry her. Her father pointed out to him the preposterousness of his request and referred to the dissimilarity of their religions as the main impediment to his acceptance. The Dutchman then decided not to let his good fortune be prevented in this way. He went to the governor right away and demanded to be made a Muslim. The governor wanted to let him have time to think it over, but the Dutchman insisted that he should be circumcised with no delay. After the ceremony was accomplished he returned again to the tailor and told him about all that had happened. The tailor now was even less than before inclined to let him have his daughter because, even though as a European merchant he had been a well-respected citizen, he now found himself in the most miserable circumstances and in a country, where he not even could understand the language and therefore was not even able to make a living. The newly converted now realized his mistake and too late regretted his foolishness.

Since reading and writing so far had been his principal occupation he though this also could provide a living as an Arab. He engaged himself at great pains in the Arabic language and learnt in short time to speak, read and write that language. The government apparently also felt pity since instead of, as a common European turned Muslim, receiving only one and a quarter species daler a month for his bare necessities, made him a knight to supply him a better income. But here he encountered yet another misfortune. Neither at school nor at sea had he learnt to ride, and his horse, realizing this, became so brave that it threw him down. Thereby he made a fool of himself for the Arabs, and this he regretted so much that he left his occupation in Mokka, where he easily could have earned enough for his survival to serve for his bread in the innermost parts of Yemen. ... Here he ended up in the most miserable circumstances. Soon he had to make a handful money writing letters, soon he wrote amulets against all kinds of disasters a man can be afraid of. Soon he preached in a mosque. He had an excellent memory, and taught himself the history of the distinguished Muslim holy men so well as one would expect from any Muslim preacher. Since he now on his travels in Yemen encountered the graves of many domestic holy men, among whom one also counts many imams, he no longer contented himself with the history of the holy, but included also political history of Yemen through that obtaining free access to the learned and a number of independent sheiks. But since he didn't have the courage continually to play the role of the beggar he finally went back to Mokka and lived there in great poverty.⁵⁰

^{49.} Niebuhr (1774), pp. 458-469, under the heading "Travels of a Dutch on various roads in Yemen not previously mentioned".

^{50.} Niebuhr (1772), pp. 192-193.

Putting this biography together with Niebuhr's other portraits of Europeans in the Orient creates a whole gallery: the Italian Donati was definitely in possession of the best scholarly and scientific credentials, but like Niebuhr he quarrelled so much with his companions that they all had died when he arrived - and died - in India. Donati came closest to stand as a model for Niebuhr, but he also was the one furthest away from sharing native points of view. The Frenchman Simon and for example Wilhelm Ross gained familiarity with Oriental conditions and points of view through giving up their Christian standpoint without however attaining the recognition they had hoped for as a reward. Lord Montagu finally - and for that matter the unfortunate Dutch renegade, informant and co-author of Niebuhr's account - gained access to local themselves in the Orient through women. Niebuhr feels sympathetic towards the enthusiasm and longing for a standpoint of all these Europeans in the Orient, but while also himself constantly changing perspective and point of view he never left his - highly mobile but nevertheless unalterable - standpoint and position as defined by his daily measurements of longitude and altitude. Niebuhr's studied asceticism demanded abstinence both sexual and religious. As method, this allowed him to see the world from more than one and therefore also a native perspective and point of view.

V. Persepolis

The most powerful picture of Niebuhr at work in the field has been painted by his son Barthold Georg Niebuhr praising his father as the great land traveller, who almost turned blind when, from March to April 1765, in the burning sun he was copying the cuneiform inscriptions of the ruins of Persepolis. Creating the foundations for the later decipherment of the various cuneiform scripts was perhaps the most important contribution of the Arabian expedition to the history of modern scholarship and science.⁵¹ As a consequence, Niebuhr's work in the field was subse-

Persepolis was in no way part of what Michaelis had imagined his Danish expedition to cover. While in Persepolis, however, Niebuhr actually did follow the instructions originally meant for von Haven: to copy "old Arab and Oriental inscriptions" even if they should be undecipherable to him (Michaelis, *Vorrede*). Looking at how Niebuhr copied inscriptions can give us a clue to his understanding of his own work out in the field in relation to the world of learning and scholarship at home in Europe.

In Egypt, Niebuhr not only copied inscriptions, but also the other pictorial representations, which he was among the first clearly to distinguish from hieroglyphic writing. Erik Iversen, according to whom Niebuhr began copying the hieroglyphic inscriptions "for his own pleasure," has praised Niebuhr's speculations on this occasion for their refreshing originality in the following words:

He was the first to draw a clear distinction between ordinary pictures and graphic hieroglyphs. Unlike Kircher, and most of his other predecessors, he was certain that the pictures – what he called the big representations -, had nothing to do with the script, but were just pictures of people or events. Only the smaller signs accompanying the pictures were in his opinion proper hieroglyphs, and he presumed that they explained the pictures. ... His final conclusions were that instead of attempting to explain the mythological significance of the pictures, the Egyptological scholars should stick to the inscriptions, make complete lists of them, compare

quently perceived and seen as merely providing the raw observations and data to be used and properly interpreted and deciphered by the real experts, the scholars and scientists back home who at best had formulated questions and instructions for the travellers. As for Niebuhr himself, it was in his correspondence with Johann Gottfried Herder and a number of other interested scholars and professors about the proper interpretations of Persepolis that Niebuhr redefined his role from that of the only surviving member of a company of learned scholar working in the field to that of the humble and subaltern copyist who's main concern seems to have been to leave decipherment and interpretation to others.

^{51.} For more details see Harbsmeier (1990).

the sign-forms of the various monuments, and then see if the script could not be deciphered by means of coptic. The sensible ideas were unfortunately never elaborated upon. They remained more or less causal (sic) remarks, but of an outstanding perspicacity; and in the history of Egyptology they preserve the memory of an original and penetrating mind and of results obtained merely by assiduity, logical reasoning, and intelligent deductions.⁵²

Part of the explanation for Niebuhr's outstanding perspicacity, assiduity, and originality in distinguishing writing from pictures in Egypt certainly has to be seen in the fact that Niebuhr followed Michaelis's instructions not only in the literal sense of trying to answer the learned questions, but more importantly in the sense of clearly distinguishing his own function and duties as observer and describer in the field from the task of the learned *Stubengelehrten* at home. It was this conscious division of labour that made it possible for Niebuhr to distinguish so clearly between what he could see for himself on the one hand and what was in need of learned efforts of decipherment and interpretation on the other.

One finds among the large number of the learned in Europe quite few, who have the patience and ingenuity to do research about antiquities, but these have as a rule neither the wish nor the opportunity to look for them other places than in their study (*Studierstube*).⁵³

Abstaining systematically from any attempt of interpretation of his own, Niebuhr was able to provide others with such accurate copies of the cuneiform inscriptions, that most of the work of decipherment could then be done at home in Göttingen and Copenhagen, thus confirming what ever since the early nineteenth century has become the general understanding of the division of labour between the scientists and scholars at home at their writing desk or even better in their armchairs on the one hand and the various travellers copying, collecting and observing out there according to the rules and instruction issued for them by others.

In this essay I have tried to show that Carsten Niebuhr actually did better and more than he himself, his son and his afterworld have been willing to recognize. The ambition to see the world from the native point of view was a formula of much later origin. Niebuhr's method did that in practice long before.

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^{52.} Iversen (1961), pp. 110-111.

^{53.} Niebuhr (1774), p. 201.

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On Forsskål's Work with the Gathering and Philological Treatment of Arabic Names for Plants and Animals

Philippe Provençal

Abstract

One of the main goals stipulated in the Royal Instruction to the members of the Royal Danish expedition 1761-1767 to Arabia was the gathering of local names and designations for plants and animals. Peter Forsskål, the appointed naturalist of the expedition, had specifically been given the task of noting local names for botanical and zoological species met during the expedition. Forsskål acquitted himself scrupulously of this task and his notes are of great academic value. The philological difficulties, methods and implications of Forsskål's material are discussed and compared with the author's own experience with collecting and analysing Arab names for plants and animals. During field work involving the gathering of local names of such organisms, the researcher may encounter the following main categories of difficulties: (1). Doubt about the botanical/zoological identity of the species in question. The informant may not always be able to distinguish similar species or know their precise designation. (2). Linguistic imprecision. The researcher may be unable to differentiate or recognise the different linguistic features of the provided names or designations, or may not be able to understand precisely what the informant means. Even if the spelling of the collected species name is controlled by the informant, spelling mistakes may occur. These difficulties are illustrated and discussed through six examples, gathered from Forsskål's philological material and the author's own field research.

Introduction

The expedition "The Arabian Journey 1761-1767", in which Forsskål took part, was designed as a multidisciplinary undertaking. Even though the initial scope of the expedition had been to gather new data in order to make advances in the philological treatment of and research in the text of the Bible, the final impact of it was much wider. It included, among other responsibilities, the gathering of as many different plant and animal species as at all possible, as well as scholarly registration of these species and the scientific description of the species, which were considered new to

science, *i.e.* the species which were not listed and described in Carl von Linné's 10th edition of his *Systema Naturae*.

In the Royal Instruction of the expedition of 15 December 1760, it is stipulated in the §§ 17-19, that the tasks of Forsskål were both philological and biological. He had to gather and systematically describe all new species and to record their local names both in Arabic and in Latin characters. He furthermore had to compare the information he acquired with the in-

r. See discussion of what Forsskål used for identification of species in the field by Hepper and Friis (1994, pp. 25-29).

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formation given by Classical Arabic authors on subjects of nature and natural history, and with the linguistic and philological information provided by the main Arabic lexica, which were used by his contemporary Europeans scholars.²

Philological treatment of Arabic species names

The treatment of Arabic species names represents a specific problem. In most cases the identity given by a particular name for an animal or plant is either not known or rather vague. There are several reasons for this:

- I. The names of species were never philologically standardized in Classical Arabic literature.
- 2. The names vary with local use.
- 3. In Classical Arabic science, which was the reference source in the Arabic speaking countries until the modern *nahdah*, *i.e.* the "renaissance" of science and letters which started in the nineteenth century and was both provoked and enhanced by the increased contacts with Europe,³ the concepts of biological species were not adequately defined. Hence there was not even an approximation of consensus about the concepts of the individual species. Some species were unanimously accepted, while the opinions about the delimitation of other species varied tremendously.
- 4. The great majority of Classical Arabic texts of good quality on zoological and botanical matters still await a serious interdisciplinary study.

When Forsskål left for the expedition, he was thus asked to solve a problem, which was already realized to be complicated. He acquitted himself scrupulously of this task and brought home a very substantial material of local zoological and botanical names in Arabic. In §18 of the Royal Instruction Forsskål was explicitly ordered to write down the local names with both

Arabic and Latin characters and, if the names varied from one locality to another, to record the local variation in the use of names. As a consequence of this instruction Forsskål recorded the names with the local dialectical pronunciations. In the Arabic-speaking domain there is in most cases a significant difference between the official written language and the spoken ones.⁴ Forsskål was a fine philologist, and he knew which grammatical features corresponded to each other in the dialects and in the official Classical Arabic language. It is admirable that he carefully wrote down the notes on local Arabic names of animals and plants and never tried to alter them into Classical Arabic.

Forsskål's publications with Arab names of plants and animals

As is well known from the literature, Forsskål died during the expedition, perishing of malaria in the town of Yerim in Yemen on the 11th of July, 1763. If his works were to be of scientific use, they had thus to be published posthumously, and this task was meticulously carried out by Carsten Niebuhr (1733-1815), who was the sole survivor of the expedition.

Two books authored by Forsskål but published by Carsten Niebuhr appeared in 1775: A botanical work *Flora Aegyptiaco-Arabica*, was published early 1775. Probably later 1775, Niebuhr published the zoological work, *Descriptions Animalium*. In these books the notes gathered by Forsskål regarding the local names are listed and published, usually in association with a scientific treatment of the species they have been recorded to designate. It must be noted that Forsskål provided all the local names he encountered, not only those in Arabic. Thus he has also noted local names in Greek and Turkish gathered during the expedition's stay in Constantinople and in other places in the

^{2.} Rasmussen (1990), p. 70.

^{3.} Merad (1995).

^{4.} Moscati et al. (1980) § 4.5- § 4.6; Bergsträsser (1995) § 6/1.0- § 6/2.4.

^{5.} Forsskål (1775a). See note about date of publication in Hepper and Friis (1994).

^{6.} Forsskål (1775b).

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Mediterranean. In Malta he compiled a list of fish species, with their local names in the Maltese Arabic dialect.⁷ In 1776 the drawings of animals and plants, which had been effectuated on Forsskål's requirement by Georg Wilhelm Baurenfeind, the illustrator of the expedition, were published in a third volume that combined drawings of animals and plants and was entitled *Icones Rerum Naturalium*.⁸

In approximately 2/3 of the cases Forsskål gave the Arabic names for plants and animals with both Arabic and Latin characters, but in the remaining cases he used only Latin characters. Therefore, his notes may give problems in the philological treatment and, provided no specimen was preserved and could be associated with the Arabic name, also in the identification of the species denoted. These problems may be attributed to the fact that Forsskål made his notes for his own personal use, and that he intended himself to carry on with further orthographic and linguistic adjustments and corrections before the observations were published. He thus did not make explicitly known how his transliterations should be read. This gives problems in the philological treatment, as Forsskål did not make any difference between plain consonants and their emphatic counterpart,9 nor did he note the letter "ayn," E.10 His notation of vowels may also be ambiguous when the species name in question is to be set in relation to the Classical language. It is to be noted that these shortcomings are to a large extent due to the fact that a scientific system of transliteration had not yet been developed at that time. In fact Forsskål noted the names as he had, or believed to have, heard them as best he could with the characters of the classical Latin alphabet.

However, when it comes to the identity of the species in question, the biological part of the name treating is scientifically correct, even though many species have shifted their taxonomic position in the zoological or botanical systems during the course of the 250 years, which have passed since the expedition worked in the field, and hence also the scientific nomenclature has changed significantly.

The difficulties in gathering and treatment of Arabic species names

This leads us to the main problem, which is being discussed here, namely how the informants understood the question about the name of a given animal or plant asked by Forsskål, or how they themselves viewed the specific identity of the animal or plant in question. I have asked Arabic speaking persons for species names in the same way as Forsskål and met the same kind of difficulties as he did.

These difficulties may be summed up like this:

1. Understanding the informant

The informant may know the identity of the animal or plant very well and say that the species is $ma'r\bar{u}f$, *i.e.* well known in his surroundings, but when asked about the name his dialectical pronunciation may be blurred or difficult to discern for a non-native speaker. This difficulty may to a certain extent be avoided if the informant is literate and asked to control the spelling of the notes taken down by the researcher. This does not of course eliminate spelling errors, but it may to a wide degree rectify misunderstandings in the auditive reception of the names by the researcher. As the orthography of words in the dialects has never been officially standardized, different informers may legitimately provide different spellings.

2. The informant's knowledge of the subject matter. The informant may not know which species he/she is being asked about or have only vague knowledge of how it is delimitated from similar species, and thus misunderstandings may occur. For instance a more widely conceived group designation may be misun-

^{7.} Forsskål (1775a), pp. XVIII-XIX.

^{8.} Forsskål (1776).

^{9.} In Arabic the consonants "d" (ع), "d" (ع), "h"(s), "k" (ط), "s" (ω) and "t" ($\dot{\omega}$) have a secondary pronunciation, transcribed as d, z, h q, s, and t, which is clearly differentiated from their non emphatic correspondents, and which is phonemic in nature. In Arabic they are consequently written with their own letters, namely $\dot{\omega}$ $\dot{\omega}$ $\dot{\omega}$ $\dot{\omega}$ $\dot{\omega}$ $\dot{\omega}$ $\dot{\omega}$ $\dot{\omega}$

^{10.} However, this letter is often indicated in the notes as a doubling of the vowel.

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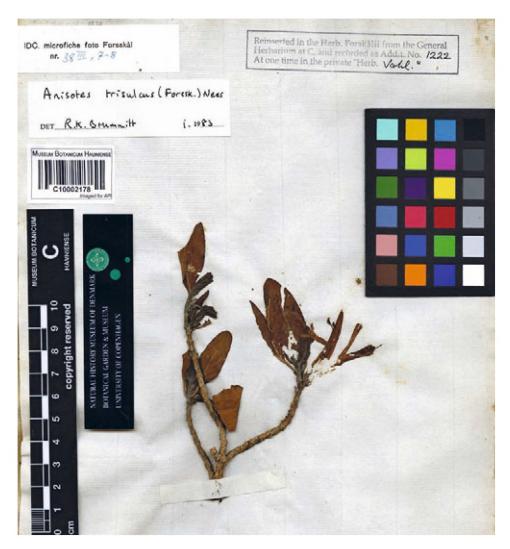


Fig. 1. Type of Anisotes trisulcus (Forssk.) Nees (original name: Dianthera trisulca Forssk.; family Acanthaceae) at the Natural History Museum of Denmark (Forsskål 1222 in Herbarium Forsskaolii at C). Collected by Forsskål at Wadi Surdud in Yemen; described in Flora Aegyptiaco-Arabica, p. CIII, No. 28; 7 (Cent. I, No. 20). Photo by the Natural History Museum of Denmark.

derstood as a species name. It may happen when the organism is a grass, an insect or a fish, or another similarly widely defined group, and the name of such a group is given by the informant. This difficulty may to a certain extent be avoided by choosing the informant with care, *i.e.* discussing the subject with him in order to gauge his knowledge of it, or choose a person whose activities involve knowledge about the species or subjects in question. For example, it is to be expected that a fisherman's knowledge of the fish-fauna is much richer than that of layperson, and that this rich knowledge of the subject will be translated into knowledge of the pertaining vocabulary. The main problem, though, may not be that the informant *perse*

has a bad knowledge of the species in question, but that the name or designation he indicates may have varied with time and place. Usage of names may show significant variation both in the Classical language and in dialects, compared to the actual use when the question about the name is asked. Another problem may be that different names can be used for different stages in the life cycle of a species, or for male or female specimens, and that this information is not conveyed to the researcher because the informant is not sufficiently aware of these complications or take general knowledge about them for granted.

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Actual examples of difficulties in the treating of the linguistic material

- 1. Understanding the informant. Three examples will illustrate this kind of difficulty.
 - a. The plant species Anisotes trisulcus^{II} (family Acanthaceae) is noted by Forsskål as having two different pronunciations in Arabic, namely "maẓ" and "maḍ". As the letter "ḍād", બ, is often pronounced as the letter "ẓā", બ, in many parts of Yemen the two ways of spelling are both possible. However, the fact that Forsskål noted the spelling 'maḍ' might indicate that the original form was correctly rendered as "maḍ". ¹³
 - b. Four plant species have been given the name wuzar in Arabic by Forsskål, but his transcriptions in Latin characters are vusar, uusar and vuzar. This reflects his scrupulous aim to reproduce the pronunciation as faithfully as possible, as a native speaker may pronounce the first syllable of the name wuzar either with a "w" or a long "ū" or with both. The fact that the dental "s" is written both as voiced and non voiced reveals the fact that this pronunciation may be floating or the difference may be hard to discern when heard. Another problem, though, is that Forsskål never explained how his transcriptions should be read.
 - c. The fish species Variegated Lizardfish (*Synodus variegatus*)¹⁵ has the Arabic name *hārit* in southern

Fig. 2. *Synodus variegatus* (Grinners; family Aulopiformes). Photo taken April, 2007, in the Red Sea at Dahab, Egypt, by Alan Slater; reproduced via Wikimedia Common.

Sinai. This name was given to me by two members of the Muzīn tribe in Southern Sinai in 1992. These two Bedouins controlled my spelling as I wrote it down. Even if the letter " \underline{t} " was not pronounced too clearly by the Bedouins, my two informants nevertheless insisted that it should be written as $h\bar{a}rit$. Without their remark I would have written $h\bar{a}rit$. In Hurghada this fish name is pronounced $h\bar{a}rit$, 18 but the lack of the final interdental is due to the Egyptian dialect. The Bedouins of Sinai have retained the interdentals.

- 2. The informant's knowledge of the subject and/or variations in the use of the names in question. Three further examples will illustrate this type of difficulties.
 - a. Forsskål noted the names sawsan and sūsan for the plant species Pancratium maritimum. ¹⁹ This name is well known in different versions from both Classical Arabic and from other Semitic languages. Forsskål mentions that this plant name may be the

^{11.} Fig. 1.

^{12.} Cf. Behnstedt (1987) § 1. 2. 3.

^{13.} Provençal (2010) p. 15. Prof. Loutfy Boulos, Cairo, has also proposed the spelling "maḍd".

^{14.} These plant species are: *Hypoestes forskalei*, *Justicia caerulea*, *Justicia resupinata* (all three family Acanthaceae) and *Sida ciliata* (family Malvaceae). Furthermore Forsskål noted: "Arab. *Vusar*. (...) nomen familiæ Justiciarum" (Forsskål 1775b), p. 4. This indicates that the name, according to Forsskål, could be used for several species of the genus *Justicia* and related genera, including *Hypoestes*.

^{15.} Fig. 2.

^{16.} Provençal (1997), No. 30.

^{17.} Provençal (1997).

^{18.} Provençal and Skaarup (manuscript in prep.).

^{19.} Fig. 3.

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Fig. 3. *Pancratium maritimum* (family Amaryllidaceae). Photo taken July, 2006, at Paestum, Campania, Italy, by Stemonitis; reproduced via Wikimedia Common.

same as the Classical Hebrew *shūshan* or *shōshannā*,²⁰ and that this plant is often said to be the white lily (*Lilium album*).²¹ Forsskål further notes: "Its similarity is great with this *Pancratium* as in pure whiteness



Fig. 4. *Lilium candidum* (family Liliaceae). Photo taken July, 2005, at VanDusen Botanical Garden by Stan Shebs; reproduced via Wikimedia Common.

it supersedes that of the lilies....". The names $sh\bar{o}shan$ and $sh\bar{o}shann\bar{a}$ are also found in Aramaic in the forms $sh\bar{u}shant\bar{a}$ and $sh\bar{o}shant\bar{a}$.

The two flowers in question, the Sea Lily (*Pancratium maritimum*) and the White or Madonna Lily (*Lilium candidum*) seem indeed superficially to be rather similar.²⁴ Flowering plants bearing the name *sūsan*, *sawsan* or *shōshan*, etc. have a long history in Semitic literature.²⁵ Up to now no certain indications for the botanical identity of the Classi-

^{20.} Forskål (1775b), p. 209.

^{21.} This plant is now called Lilium candidum; Fig. 4.

^{22. &}quot;Ad Hebræorum שושן? Illum plantam Doctiss. Celsius Lilium album putat. Similitudo magna est cum hoc Pancratio, quod candore superat Lilia & omnem albedinem tinctoria arte provocatam. Candidus vestium color Sacrificulis olim reservatus erat; an vero hinc concludi potest, regale illum fuisse ornamentum, præter purpuram?"

^{23.} Löw (1881, nr. 323).

^{24.} Cf. Blamey and Grey-Wilson (1993, No. 2148 and No. 2270).

^{25.} Fig. 5.

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Biblical Hebrew: šōšannā, šūšan, שׁוֹשַׁנָה - שׁוּשַׁן

Aramaic : šūšantā, šōšantā שׁוֹשַׁנַתָא

Arabic: sūsan sawsan سىوسىن

Fig. 5. Semitic names used for "white lilies"

cal Hebrew *shūshan* or *shōshannā* are available.²⁶ In Aramaic and Arabic translations of Greek works on pharmacology and other topics the Madonna Lily (*Lilium candidum*) as well as other flowers such as certain irises have been translated with this name.²⁷ It is therefore natural that the names *saw-san* and *sūsan* as recorded by Forsskål should be associated with *Pancratium maritimum*.

b. Regarding fish names, the big Coral Grouper (Plectropmomus pessuliferus), often called the Roving Grouper, or the Roving Coral Grouper, is called nājil at many places along the Red Sea. This name was noted by Forsskål and confirmed to me during my investigations in Hurghada in May 2011.28 Nevertheless, in Sinai this name was used by the Bedouins of the Muzīn tribe for the Lyretail Grouper (Variola louti).29 As the Lyretail Grouper is the only grouper in this region which has a lunate caudal fin,30 it is unlikely that the species were mistaken for the Roving Grouper, especially as my informant was a fisherman. We have thus here apparently an instance where a name may shift from one species to another. It must be noted, that both species are large carnivorous fish, that are closely related

Fig. 6. Several species of Coral Groupers (family Serranidae) for sale at the fish market in the Egyptian town of Hurghada on the Red Sea Coast. Forsskål must have collected specimens and vernacular names for fish from local fishermen and at fish markets at the Red Sea. Photo by P. Provençal.



Fig. 7. The Lyretail Grouper (*Variola louti*; family Serranidae) in its natural habitat at a coral reef in the Red Sea. Photo by P. Provençal.

to each other and have similar ways of living, and that their physical appearance shows their close relationship even though the form of the caudal fin in the respective species is conspicuously different.

c. In Hurghada the name kushar is the common name for groupers (family Serranidae) sold in the

^{26.} Provençal (2001), pp. 210-211.

^{27.} Cf. Löw (1881), No. 323; Leclerc (1883), art. 1253.

^{28.} Forsskål (1775b, p. 42 No. 41, c); Provençal and Skaarup (manuscript in prep.); see in Fig. 6 various species of Groupers for sale in a fish market in Hurghada at the Red Sea. 29. Provençal (1997); see the fish photographed in its natural habitat in Fig. 7 and Forsskål's original collection, the type specimen, in Fig. 8.

^{30.} Cf. Randall (1992, pp. 44-51).

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Fig. 8. Type of *Variola louti* (Forsskål, 1775) (family Serranidae; original name: *Perca louti* Forsskål) at the Natural History Museum of Denmark, ZMUC, no. P43566 in Forsskål's "Fish Herbarium." It was collected by Forsskål at Jidda in Saudi Arabia or Luhaiya in Yemen and described in *Descriptiones Animalium*, pp. XI and 40, no. 40. Photo coutesy the Natural History Museum of Denmark, ZMUC, by Marcus Anders Krag.

fish market.31 According to the informants, they unanimously told that kushar is a group name including five different species. In Sinai it was a name used for both the groupers, the Coral Hind (Cephalopholis miniata) and the Peacock Grouper (Cepholopholis argus). Forsskål mentions this name as the species name for the Brown Marbled Grouper (Epinephelus fuscoguttatus), and he writes that this name is from Jiddah (*Djidda*).³² In Suez this species is called kassjara, following Forsskål's own notation.33 Forsskål thus clearly thinks that this common denomination is a species name. However, it is a common name for a range of different species of groupers in Jiddah,34 and thus Forsskål has thus apparently misunderstood the real meaning of the name.

Conclusion

It is clear from the above that both a taxonomic and a philological treatment of this kind of linguistic data is

necessary in order to determine precisely the meaning of information collected during field work.

Furthermore it is clear, that in treating Arabic botanical or zoological texts one must be aware of the variation in both pronunciation and concepts of the informants. As the species names used in Classical Arabic texts in the vast majority of cases are names adopted from the local population and used by the respective authors it thus becomes imperative to determine how the author of an Arabic text understood the species designations he used. What was the informant's or author's scholarly, sociological and geographical background? How well informed was he?

An interdisciplinary approach to the treatment of the linguistic material, whether notes collected in the field from the verbal information of local people or longer Arabic texts, thus becomes imperative in order to determine the subject matter of the text or the precise content of the species names. This is the only way by which a precise appraisal of the sometimes very detailed information provided in Classical Arabic biological texts will be possible. The interpretation of Arab plant and animal names is like assembling a big game of jigsaw puzzle, but Forsskål has certainly given his important contribution to many pieces in that puzzle.

^{31.} Provençal and Skaarup (manuscript in prep.); Fig. 6.

^{32.} Forsskål (1775a), p. 42 No. 42 b.

^{33.} Forsskål (ibid.).

^{34.} Neve and Aiidi (1972), No. 34. As Neve and Aiidi (1972) noted the local dialectical pronunciation, they write the name as *kshar*, but the root consonants in the name are the same.

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Niebuhr in Egypt¹

Roger H. Guichard

Abstract

The Royal Danish expedition is justly celebrated for its contribution to an understanding of Arabia. But the most concentrated period of time its members spent together was not in Arabia at all. It was in Egypt. The sojourn in that country was an unexpected boon, Egypt not even appearing on the original itinerary of the expedition. But what an opportunity it presented to an undertaking with an avowedly Biblical purpose. When Niebuhr and his companions were detained for a year in Egypt in 1761-1762, it was, after all, in a place that some have called the cradle of the Jewish people. But although Egypt had existed for millennia, with or without the Jews, the notion that its history served as little more than stage setting for the drama of mankind as played out in the Hebrew Scriptures was pervasive in eighteenth-century Europe. But freed for the year from the painstaking instructions of Michaelis, Niebuhr was able to approach the country with an open mind and in so doing made an early contribution to the nascent discipline of Egyptology. He also produced the first detailed maps of Cairo and the Delta produced by anyone - European or otherwise and left a detailed snapshot of the country in the middle of the eighteenth century. The period in Egypt introduced the themes that characterized the remaining five years of Niebuhr's travels.

The Royal Danish Expedition to Arabia Felix has long been recognized as a landmark in the European study of the Arab and Muslim worlds. But if its contribution to the knowledge of the "Orient" was largely in the sphere of the profane, it should be remembered that the impulse for its dispatch was primarily religious. The moving force behind the expedition was the foremost sacred philologist in Europe, Professor Johann David Michaelis, who believed that in the highlands of *Arabia Felix* or the Yemen, a kind of "eastern" Arabic was spoken that was closer to Hebrew than its variants in the west; and that this study would lead to important contributions to an understanding of the Hebrew Scriptures. Notwithstanding the ex-

Given this frame of reference it might be asked: "Why Niebuhr?" and "Why Egypt?" After all, the expedition was staffed by Danes and Swedes in addition to Carsten Niebuhr, a Frieslander and a Saxon, and its goal was Arabia Felix, not Egypt. But however much the Swede Petrus Forsskål is remembered for his contributions to eighteenth-century botany; and

plicitly religious purpose, the expedition was staffed with "scientists" who were to mine this mother lode for its riches. They would be guided by *Fragen*, or questions assembled by Michaelis that included contributions from scholars across Europe. It was the marriage of science and religion that made this undertaking so unusual: the two were only different aspects of the same "truth" for Michaelis, and the reconciliation of their apparent differences was the express purpose of the expedition.

I. This paper was drafted while the author worked on a book of the same title; the book is now published (Guichard 2013).

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the Dane Frederick von Haven for the manuscripts that make up the core of the Royal Library's collection, it is the expedition's cartographer Carsten Niebuhr who is revered in the annals of exploration. "Revered" is not too strong a word. To the serious student of the European exploration of Arabia, "Niebuhr" has always been a name to conjure with, and he was cited by many of the explorers and travellers who followed in his footsteps, particularly those who wrote in English, as their great predecessor.

John Lewis Burckhardt (a Swiss who wrote in English),² Richard Burton,³ Gifford Palgrave,⁴ J. G. Lorimer,⁵ Edward Robinson,⁶ David Hogarth⁷ and St. John Philby⁸ all bear witness to the enduring influence of Niebuhr in opening the Peninsula to Europe. Part of the reason may be that, of the members of the expedition, only Niebuhr left a published record of

2. See Burckhardt (1822). Burckhardt died in Cairo in 1817 and his notes were assembled by an editor so the absence of specific references is understandable, but he refers to Niebuhr throughout the book.

3. Burton (1893). Burton was not a man to readily credit others working in the same field. Although he praises the "accurate" Niebuhr, in his *Pilgrimage to Al-Madinah and Meccah* (1893) he seems to focus more on Niebuhr's occasional lapses than on his celebrated accuracy.

4. Palgrave (1865) dedicates his *Narrative of a Year's journey through Central and Eastern Arabia* "To the memory of Carsten Niebuhr in honor of that intelligence and courage which first opened Arabia to Europe ... "

5. See his monumental *Gazetteer of the Persian Gulf, Oman, and Central Arabia* (Lorimer 1915) where he calls Niebuhr the best source of information about the Gulf of the middle of the 18th century.

6. Robinson (1867). In his *Biblical Researches in Palestine and Adjacent Regions* he often refers to Niebuhr, particularly in the Sinai.

7. In *The Penetration of Arabia* Hogarth (1904) devotes a chapter to Niebuhr in the Yemen and is profuse in his appreciation of the German: "... if any of his fellows surpassed him in energy, courage, or endurance, in intelligence or in his measure of that scientific temper which is equally free from prejudice or from laxity, then a more remarkable mission was never dispatched to any land." (p. 40).

8. Philby (1922) opens *The Heart of Arabia* with a quotation from the French edition of the *Travels* and calls Niebuhr "the father of Arabian exploration."

his travels in his lifetime. But there is more to it than this, and it surely has to do with the breadth and quality of that record. Niebuhr was a man notable for the catholicity of his interests and, as we will see, his contributions extended well beyond his cartographic duties, narrowly defined. It is the gradual build-up of unimpeachable and timeless information in Niebuhr's accounts that is most impressive. It must be in recognition of this quality that moved the editor of the *Lives of Eminent Persons*, published in London in 1833 by the Society for the Diffusion of Useful Knowledge, to rank Niebuhr among history's intellectual and scientific giants.⁹ They included Galileo, Kepler, Newton, Adam Smith, Michelangelo and Sir Christopher Wren.

And then, "Why Egypt?" Here, the answer is equally straightforward. The goal of the expedition may have been Arabia Felix but the longest sustained period of time the members of the expedition spent together was not in Arabia at all. It was in Egypt. When the decision was taken to send them via the Mediterranean and Red Sea rather than Tranquebar and India, it would have important ramifications for their work. Due to a combination of factors – having to do with internal friction in the party, unrest among the Bedouins in the Hejaz, and unsafe conditions in the important Sinai port of Tor – they were detained in Egypt for over a year, from September 1761 to October 1762 when they sailed from Suez for Jidda.

What an opportunity Egypt presented to an expedition with an expressly biblical purpose! They were, after all, in a country that some have called "the cradle of the Jewish people." But although Egypt had existed for millennia, with or without the Jews, the notion that its history served as little more than stage setting for the great drama of mankind as played out in the Hebrew Scriptures was pervasive in eighteenth-century Europe. To his credit, Niebuhr approached Egypt with an open mind, without the credulity or religious provincialism that characterized the usual approach to the country. It was surely the absence of

^{9.} Society for the Diffusion of Useful Knowledge. (1833).

^{10.} See Les Juifs en Egypte (Fargeon 1938).

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a specifically biblical focus that led to the quality of his insights.

In the nearly seven years of his travels Niebuhr actually spent the most time in India, followed by Egypt, Iraq, Yemen, Anatolia, Syria and only then Arabia, if by that we mean his short stays in Jidda and Muscat. But in terms of space, nearly a fifth of the almost 1,200 pages of his Travels are devoted to Egypt. It was here that he developed and refined his mapmaking, to be applied throughout his travels, although never replicated in the same detail; it was here that he first became interested in inscriptions, to be followed by his seminal contributions to an understanding of hieroglyphic, Himyaritic and cuneiform scripts; it was in Egypt where he was introduced to the baleful effects of rule by an alien elite that would accompany him all the way to the borders of Christendom; and it was here that he made his most complete study of a country, recording its physical configuration, population, religion, government, commerce, dress and popular pastimes.

What, then, did Niebuhr find in Egypt that would be of interest to the scholars of Europe?

The Antiquities of Egypt

It was with the "antiquities of Egypt" that Niebuhr expanded his role as reporter and indulged his scholarly bent, although not in a way that might be expected of an expedition with an expressly biblical purpose. Had Michaelis known that they would spend over a year in Egypt we can imagine the kind of questions he might have armed them with:

- What was the frequency and average length of famine in the Nile valley?
- Was a famine of seven years unusual, and had such a famine occurred within the memory of the inhabitants?
- Where were the corn storehouses of Joseph located?
- Where was the land of Goshen? Where were the sacred cities of Pi'-thon and Ra-ma-ses?
- What was the Egyptian method of making bricks?

 Were swarms of locusts borne into the country on an easterly wind?

As it was, the members of the expedition were left to their own devices and Niebuhr, for one, resisted the temptation to view Egypt through the prism of the Hebrew Bible. That was fortunate because it was the Bible itself, among other influences, that stood in the way of serious scholarship about ancient Egypt. At least since the Rabbi Benjamin of Tudela¹¹ had opined in the twelfth century that the pyramids of Giza were the corn storehouses of Joseph (although others suggested that a pyramid makes a poor granary) a Biblical view of Egypt had been irresistible to scholars and travellers.

But the Bible was not the only source of error. The hieroglyphs, or the sacred writing of Egypt, were thought to constitute a system so arcane that it could be understood only by initiates. An early vogue of hieroglyphic interpretation concentrated on symbolic meanings, and produced translations that were so wide of the mark as to be ludicrous. One eighteenth-century scholar seriously suggested that if the Psalms of David were translated into Chinese and written in Chinese characters, Egyptian hieroglyphs would be reproduced.¹²

Even after the deciphering of the hieroglyphs put an end to much of the nonsense, the Bible still had a strong and enduring hold on scholars. Richard Lepsius and William Flinders Petrie – probably the greatest Egyptologists who ever lived – would wrestle mightily in the 19th and early 20th centuries in an effort to reconcile their findings with biblical chronology. Lepsius,¹³ the great German successor to Champollion, would finally conform the histories of the two ancient peoples only by purging the Old Testament of repetition, inconsistencies and obvious absurdities. Petrie¹⁴ was so

II. Benjamin made a tour of synagogues in central Europe, Greece, Palestine, Iraq, Ethiopia, India and Egypt in the years II65-II73. His account, originally written in Hebrew, was printed in Constantinople in 1543 and was later translated into Latin and French. A modern edition is Benjamin (1993).

^{12.} See Budge 1978), Introduction, p XVI.

^{13.} See Lepsius (1853).

^{14.} See Petrie (1906), pp. 208-220.

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troubled by the numbers of the Children of Israel appearing in Exodus and Numbers ("six hundred thousand and three thousand and five hundred and fifty" men, not including women and children), that he posited that a mistake in the translation of the Hebrew word *alaf* was the culprit. Extrapolating from the 603,550 men to a total population would have resulted in a figure of some 3 millions, at the time greater than the population of the entire Delta. This was clearly untenable, there being nothing in the history of Egypt to suggest depopulation on this scale. But if *alaf* were read as "tents" rather than "thousands" – that is to say, 600 tents, or in the neighbourhood of 3,000 people – Petrie reasoned, the account in Exodus might make sense.

The fact that the hieroglyphic script contained the elements of a phonetic system was first suggested by the Abbe J. J. Barthélémy interestingly, in 1761, the same year the Danish expedition arrived in Egypt. It was based on his reading of royal names appearing in ovals, or cartouches. But the insight was not followed up and it would be another six decades before significant progress was made in unlocking this key to an understanding of ancient Egypt.

What did Niebuhr find in his year in Egypt that contributed to this outcome? He, of course, visited the pyramids of Giza and indulged his surveyor's bent by confirming that the sides of pyramid of Cheops were aligned to the cardinal points of the compass. He set up his alidade, laid out a chord and determined the height of the two largest pyramids. The figures were rough, due to the hurried nature of the survey, and he was tempted not to publish them. So it is safe to say that no dramatic discoveries were the result of his time on the Giza plateau.

But he did speculate about the age of the stone from which the pyramids were quarried, with the little petrifications¹⁵ that Strabo had suggested were the remains of lentils fed to the workers. They were, in fact, marine constituents in the sedimentary rock, typical of limestone, and Niebuhr's questions were those of a scientist, suggesting an antiquity that would dwarf the chronology of the earth understood at the time.

But it was not as a geologist that Niebuhr left his mark. In the process of making his map he noticed hieroglyphic inscriptions everywhere in the city. He began to copy them, and by the end of the year in Cairo he was as familiar with hieroglyphs as he was with Kufic and other Arabic scripts. They occupy 15 plates in volume I of the *Travels*. But he was not content to merely make copies. As his facility grew he began to speculate on the individual signs themselves and in plate XLI he has reduced them to a kind of system. There, he listed over 300 individual signs in 12 horizontal groupings, organized from bottom to top in increasing order of abstraction.

In the first grouping he shows men, sitting, kneeling and lying down. We now know them to be determinatives indicating various actions or categories. In the second he includes parts of the body, in the third animals, and in the fourth, birds. By the time he has reached the twelfth group, the signs are increasingly linear and abstract. What Niebuhr has done, in fact, is what Champollion would do 70 years later in organizing the first dictionary of the hieroglyphs: ¹⁶ Champollion reasoned that if the Copts, who were the racial and linguistic descendants of the ancient Egyptians, organized their vocabularies this way, they must be reproducing a system that already existed.

Niebuhr had already expressed his intuitive grasp of this relationship:

Among the many scholars of Europe there surely are some with the patience and skill to study ... the ancient Egyptian inscriptions. So if travellers provide them with a sufficient number, I am certain they will be able to clarify many matters, especially if ... they have an understanding of the Coptic language spoken before the arrival of the Greeks, for this seems essential to an understanding of the hieroglyphs.¹⁷

^{15.} See Niebuhr (1968), Vol. I, pp. 199-200: "This is cause for reflection on the antiquity of Egypt. For, how many years must have passed before sufficient number of these little snails were born and died, for these mountains to have reached their present height? How many years must have passed before Egypt became dry? ..."

^{16.} See Budge (1978), Introduction, p. XXV.

^{17.} Niebuhr (1968), Vol. I, p. 201.

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The statement is not only a key insight, but is an epitome of Niebuhr's method, whether applied to geography, history or language. For some explorers, to be first is everything and to be second, nothing. Niebuhr, on the other hand, was content to contribute to a growing body of knowledge that would eventually unlock the secrets of the past. If his work on the hieroglyphs had no direct consequence – Champollion came to the same conclusions independently – the same was not true of Niebuhr's later work on the trilateral inscriptions at Persepolis. There, his extremely accurate copies of the Babylonian, Elamite and Old Persian texts led directly to the deciphering of the texts and of the cuneiform script itself.

Again, it was a liberal reading of his responsibilities by the expedition's cartographer. Without overstating the case (something, incidentally, that Niebuhr himself was constitutionally incapable of doing) we see him anticipating Champollion in his seminal contribution to the deciphering of the hieroglyphs, and even Charles Lyell in his suggestion that the earth had changed slowly over millions of years, not in a few cataclysms over the few thousand years of the Hebrew Bible.

Niebuhr as Cartographer

Niebuhr was the expedition's cartographer and he took his mapmaking duties seriously. It was in Egypt that he produced his first maps (the map of Constantinople was largely a product of a second visit to the city in early 1767). They were unprecedented in their detail and accuracy. Over the many months of their residence in Cairo Niebuhr made several boat trips down the Nile to Rashid and Damietta on the coast. They allowed him to survey the two major branches of the river and he used a combination of celestial position-finding, compass headings, and judicious questions of the boatmen to fill in the detail. Most importantly, given the instructions of Michaelis, he listed the villages along the river in both Latin and Arabic characters. No one had made a map with this level of detail before and it served as the standard for

the next thirty-plus years, being reissued¹⁸ (without attribution) on the eve of the French invasion of Egypt.

But it was with his map of Cairo that Niebuhr really broke new ground. Here he was not on the Nile where he could take his sightings and pose his questions in relative obscurity. Instead, he was in the first metropolis of the Arab Muslim world, a city that in the middle of the eighteenth century was actively hostile to foreigners, especially if those foreigners were Christians and Franks. Europeans were subject to the conditions of the caliph Omar:19 they couldn't ride horses and had to dismount from an ass in the presence of a Turk; they couldn't drink wine publicly or ring bells to announce their religious services. For the local minorities - Copts and Jews - the restrictions were even more severe. Not long before the arrival of the expedition, the inhabitants of Damietta had taken offense at French merchants' mixing with Moslem women, and had risen up massacred them to a man. So, in the middle of the eighteenth-century Europeans were very careful residents of Egypt indeed.

Given the fraught state of relations between Christianity and Islam, - the Turks had been turned away from the gates of Vienna for the last time only on 1683 - mapmaking was dangerous, if only because maps had military uses. Niebuhr didn't let this stand in his way. It is clear that he walked the streets of the city, over and over again. As aids, he used a small pocket compass to determine direction, and his own two feet and ten fingers as counters to determine distances, with perhaps a *subha*, or Muslim rosary, to enumerate the hundreds. We can imagine him, then, this obvious Frank, although he had adopted the loose local dress by then, appearing in the major neighbourhoods, at first accompanied by a *sarraj* - a kind of local policeman - and then increasingly alone. As the months

^{18.} A map entitled "Carte Physique et Politique de l'Égypte, par E. Mentelle ... et P.G. Chanlaire" and dated "An VII" (in the French Republican Calendar, = 1799) forms part of Conquêtes des Français en Égypte (Herbin de Halle 1798-1799). An insert called "Carte Particulière et Détaillée du Delta" is so close to Niebuhr's map that it might have been traced from Niebuhr's original. Indeed, it appears that it was.

19. See Butler (1902), p. 448.

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passed he would have become almost a part of the landscape. But there were still areas too dangerous to enter.

He wrote up his notes on a daily basis in the rented house in the *haret al-ifrang*, or Frankish quarter, outside the Fatimid core of the city. As the map slowly took shape, he probably revisited the landmarks to verify the distances, and retracing his steps today is a testament to their accuracy. For the outlying areas he may have ridden a donkey, although some were within walking distance and it was always better to keep a low profile. The resulting map of the city – plate XII in volume I of the *Travels* – with its key to mosques, churches, quarters, gates, ponds and bridges, in both Latin and Arabic characters – was unprecedented in its detail and accuracy.

The French expedition map published in 1811 is more detailed still, but the French had conquered the country, brooked no interference from the population and deployed an army of savants to record its detail. It is remarkable that a solitary European, without official sponsorship, in the midst of a hostile populace, was able to produce such a map. It was an important precursor of things to come, although none of the city maps he later prepared would replicate the detail of Cairo. There, his curiosity too often attracted the attention of the authorities, and he was not anxious to repeat the experience.

In the process of making his map Niebuhr kept his ear to the ground and most of the detail in the 230 pages of his *Travels* devoted to Egypt represents a liberal reading of his duties as the expedition's cartographer. His statement of what the map is *not* is vintage Niebuhr: "One will not find a history of the city here; I have described its location and its size as I actually found them." ²⁰ But we should be forewarned about Niebuhr's disclaimers. He is always rather too modest, and the portrait he paints of Cairo in 1761-1762 is well fleshed out.

He would describe the polyglot population, Muslim, Christian and Jewish, the latter two in their own effective ghettos. But *all* Egyptians groaned under the

tyranny of the Mamluk beys, a mostly-Circassian slave caste that had ruled Egypt since the thirteenth century. Niebuhr lists the eighteen members of the *beylicate*, with details of their origin and rise to prominence. As he made his way back to Europe, through the Persian Gulf, Iraq, Syria, Anatolia and Rumelia, or European Turkey, he would be witness everywhere in the Ottoman East to the baleful effects of rule by powerful outsiders.

Niebuhr also described the "diversions" of the populace in their hours of leisure, of the favourite gathering places for celebration of the Muslim feasts, and of the popular prejudices and predilections. He listed the main imports and exports of the country, from paper and French fabric to gum Arabic and coffee. Janissaries – "new troops" in Turkish but a kind of merchant-warrior class in Egypt – were heavily involved in the still very profitable Red Sea coffee trade, and the members of the expedition would later sail from Suez to Jidda in the company of many of these men. They would be another constant in his *Travels*, and Niebuhr would see the last of the janissaries only just before crossing the border from Moldavia into Poland five years later.

The Red Sea and Sinai

But in departing from Cairo Niebuhr was not done with Egypt. There remained three tasks that were particularly important to Michaelis and, not surprisingly, they had to do with the Bible. The first dealt with the place where the Children of Israel crossed the Red Sea. It was hoped that a close examination of the tides and sea-bottom in its northern reaches might contribute to an understanding of the event. The other tasks would require travel in the Sinai Peninsula. There, in 1722, the prefect of the Franciscans in Cairo had seen odd inscriptions on a *Gebel el-Mokatab*²¹ – or "written mountain" – that had sparked immediate interest in Europe, where scholars believed they might be the beginnings of the square Hebrew script, scratched by

^{21.} See Clayton (1810). The information had clearly passed by word of mouth prior to this published version.

^{20.} Niebuhr (1968), Vol. I, p. 109.

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the Israelites during their wanderings in the wilderness. And it was known that the monastery of St. Catherine in the south of the peninsula had a library with many old copies of the Bible. Von Haven was tasked with examining them with a view to discovering any differences they might contain.

Given the limited time in Sinai and the fact that he was involved in all three tasks, Niebuhr was unable to make a thorough study of the Red Sea around Suez. He measured the time and tides on a single day before setting out for the south, and on four days after his return. The information was admittedly scanty but it suggested that tidal movements in the northern reaches of the Red Sea were very different from those in Germany where the Elbe exited into the North Sea. Michaelis's suggestion that an extraordinary ebb upon ebb tide, such as occasionally occurred there, may have played a part in the crossing was, therefore, unlikely.

As for the Bibles in the monastery, the long journey proved to be a fiasco. They had a letter of introduction from the Greek Patriarch in Constantinople, but lacked the letter from the Bishop of Mount Sinai in Cairo. Without this letter they were denied entrance to the monastery by the monks. Michaelis was distressed when he learned of the rebuff and a stern letter of reprimand was drafted for von Haven, whose fault the failure mostly was. In the event, only with the supposed Gebel el-Mokatab were they rewarded with success, and it was not something that would interest the foremost biblical philologist in Europe. There was no "written mountain" as such, only names in Greek and Nabataean letters, scratched on soft rock faces by pilgrims on their way to the holy places in the south. But in the process Niebuhr was led by his Bedouin guides to something nearly as interesting, the 4th-dynasty Pharaonic temple now known as Serabit el-Khadem, where, much later, Flinders Petrie would find rude scratchings of a script that came to be known as "proto-Sinaitic," that did represent a stage in the development of alphabetic scripts to the north.22

22. See Petrie (1906), p. 129.

Back to Copenhagen

When the members of the expedition boarded ship in Suez in October of 1762, they passed out of Egypt and so, technically, beyond the bounds of the subject we have examined. However, many of Niebuhr's experiences on the return to Copenhagen would be a repeat of those in Egypt and replicate a theme of this conference, the intersection of science and religion.

Niebuhr epitomized the two disciplines. He represented the best of the Enlightenment seekers, a believing Christian - and there was hardly a man in eighteenth-century Europe who dared call himself an atheist - but one who believed with the New Testament that there were things that belonged to Caesar - or science - and things that belonged to God. We see him reflecting on Exodus 13, 20 when they reached Ajerud "at the edge of the wilderness" on the road to Suez; or later wondering whether Serabit el-Khadem wasn't perhaps the Mount Hor of Numbers 33, 37; or even whether the Kurdish girls - "unveiled and perfect beauties" -watering their flocks in southern Anatolia weren't doing just as Rebekah did when she assisted Abraham to drink in Genesis 24, 13-26. But his point of departure was not the literal truth of the Scriptures, into which nature must be fit, as if facts must first be subject to biblical conformity before they passed muster as science or history.

Niebuhr was not only a believing Christian, but also an interested observer of the complex interplay among various creeds, most of them representing the three Abrahamic religions, or "religions of the Book": Judaism, Christianity and Islam. Here he acted as a sociologist, another kind of scientist, although the term was unknown at the time. Better yet, he was a cartographer of the sacred, but the landscape he surveyed was not so much the physical land as it was the space between the ears of the believers.

It began in Egypt where he was witness to the tensions between Muslims, Christians and Jews; of the suspicion by Muslims that the Christians were stalking horses of the Europeans and that the Jews represented a kind of fifth-column, preferring Ottoman interests to those of the native Egyptians. But it was

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not only between creeds but among them: of the distrust by those Niebuhr called Rabbinite Jews of their Karaite coreligionists, and the hostility of Orthodox Copts to the Roman Catholic religious orders, zealously proselytizing in their midst. If there is another recurring theme of Niebuhr's travels it is the presence of these Catholic religious – Jesuits, Franciscans, Carmelites, Dominicans and Capuchins – all dedicated to converting Oriental Christians (Muslims were out of bounds) to the faith of Rome. For Oriental Christians, apostasy was attractive, promising access to European languages, learning and sponsorship, and an escape from their often-difficult lives as *dimmis*, or official Ottoman minorities.

India represented a kind of neutral ground where, under the relatively benign rule of the English, Parsis, Portuguese Catholics, Armenians, Greek Orthodox, Jews, Hindus of various castes, Sunnis, and Shiites all worshiped with complete freedom of conscience. The experience made a profound impression on our *billigdenkender Reisender*, or fair-minded traveller.

He had already seen the effects of religious intolerance in Egypt, and would later witness the lethal hostility between Sunnis and Shiites (not to mention Kurds and Turkmen, Christian Jacobites and Nestorians, Jews and Yezidis) in the three *vilayets* of Turkish Iraq. In greater Syria he would see a kaleidoscope of religious belief: of orthodox Sunni and heterodox Muslim sects – Nusayris (or Alawites, as they are known today), Isma'ilites, Metwalis and Druse; Jewish Rabbinites, Karaites, and Samaritans; Maronites, Greek Catholics, and Armenian Catholics in communion with Rome, as well as Greeks and Armenians who still recognized their ancient orthodox patriarchs. And these were only the tip of the iceberg in the religious mix of Syria.

In Jerusalem he would witness the unedifying hostility between the Latin and Orthodox churches, and was fair enough to reflect that the city was probably better off under Ottoman control, albeit under a kind of spiritual customhouse. If the Christians had ruled they would probably prevent other creeds from worshipping in the city. And if there was Sunni tyranny amid the religious diversity of Syria, at least

there was no Inquisition to punish departures from orthodoxy.

Niebuhr was not without parochial feelings himself, and his concern about the activities of the Roman church is apparent throughout, not least when he witnessed the poverty to which the clergy had reduced the peasantry in Poland. He generally saw other religious dispensations in the best possible light, unless perhaps they were Papist. But he was never bitter. Though a Protestant, he stayed with members of Catholic religious orders throughout this travels, and always refers to them as "the good fathers". But we suspect he looked back to that placid atmosphere in Bombay as the epitome of religious tolerance.

David Hogarth may have included a chapter entitled "Niebuhr in the Yemen" in *The Penetration of Arabia*. But he might just as well have addressed Niebuhr in Egypt, or Niebuhr in India, or Niebuhr in the Persian Gulf, or Niebuhr in Iraq, or Niebuhr in Syria. Because they are all of a piece – the same wide-ranging inquisitiveness and intelligence, absorbing, processing and committing to paper what he sees. It is that quality of scientific discernment and open-mindedness – whether applied to geography, language, history or religion – that makes Niebuhr such a valuable resource. Anyone who doubts the pertinence of his observations today has only to recall the history of the region over the past several years to be convinced otherwise.

Hogarth sums up his appreciation with the statement that "It would be tedious to quote a hundredth part of Niebuhr's judicious observations." I hope with this piece to have exposed the reader to a small portion of that trove.

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Niebuhr and the Visual Documentation of the Arabian Voyage, 1761-1767

Anne Haslund Hansen

Abstract

This paper discusses the characteristics of the visual documentation produced during the Arabian Voyage, 1761-1767, and published as illustrations in *Beschreibung von Arabien* (1772), *Reisebeschreibung nach Arabien*, I-II (1774 and 1778) and *Reisen durch Syrien und Palästina* (1837). The illustrations are examined with regard to their motifs and distribution within the published works. The present study demonstrates that the images have little direct correspondence with the formulated scientific goals of the expedition. The point of view of the illustrations indicates a visual mapping, which is continuously shifting between overview and detail and between the immediately recognizable and the exotic. This links to the presupposed perceptions of the Orient as expressed through the initial planning of the expedition. Other factors which influenced the published results, such as the artistic skills and preferences of the draftsmen involved and – in the process of publication – reader targeting, are also discussed.

The mastermind behind the Arabian Voyage was Johann David Michaelis (1717-1791), professor of theology at the University of Göttingen. Michaelis's impetus for the expedition was for its members to bring back empirical observations on subjects pertaining to the Old Testament. The country of Yemen, in particular, was seen as a laboratory in which traces of the Old Testament world could still be found and studied. This contrasted with a more progressive world, under the influence of the New Testament, and from where Michaelis operated and formulated the goals for the expedition. Echoes of these ideas and perceptions were channelled into the expedition's visual documentation.

Emphasis on empirical observation played an integral part in the planning of the Arabian Voyage. The members of the expedition were formally instructed to In the following, I wish to ask how can we quantify, classify and label the images from the Arabian Voyage and I will pose some questions about what they represent in the context of the publications into which they found use.

Four illustrated volumes have been considered, namely, *Beschreibung von Arabien* from 1772, *Reisebeschreibung nach Arabien*, I-II, 1774-1778 and the posthu-

keep a daily journal and to observe and document whatever was adhering to their particular field of expertise. Interpretations based on independent reasoning were specifically encouraged.² Visual documentation was considered of importance and the need for a trained draftsman was stressed.³ In the final result – the publications by Carsten Niebuhr (1733-1815) – these two methods of documentation, written and visual, appeared alongside each other.

^{1.} For a discussion on the views of Michaelis, see Hess (2000) and article by Hess in this wolume.

^{2.} Michaelis (1762), "Instruction", §8.

^{3.} Michaelis (1762), "Instruction", §43.

mous third volume of the *Reisebeschreibung*, entitled *Carsten Niebuhr's Reisen durch Syrien und Palästina, nach Cypern und durch Kleinasien und die Türkey nach Deutschland und Dänemark*, which was published in 1837. These volumes, all printed in a quarto format, contain altogether 161 numbered plates. In addition to these are two unnumbered fold-out maps and a small amount of vignettes. The motifs range from maps of cities and historical sights to inscriptions and images of the local inhabitants and their manners and customs. The engravings are modest in scale and decisively contextual. They are tied to the text and were clearly not intended to be sold separately.

The four volumes dealt with here are all part of the material that Niebuhr prepared for publication under his own name. It is therefore reasonable to presume that the content of these works, the interrelation between images and text and the distribution and quantity of the plates in these works, largely correspond with the intention of the author.

Within the framework of the present conference, World views and local encounters in early scientific expeditions 1750-1850, I have chosen to understand "local encounter" as the entirety of impressions that the travellers were confronted with. I subsequently understand "world view" as the set of practices by which these encounters were transformed into something that was not only comprehensible, but also adhered to a specific way of communication.

In this perspective it might be useful to think of all the published images – and not only the maps made by Niebuhr – in map making terms. In "The Science of Cartography and its Essential Processes", Joel L. Morrison has drawn up the following sequence, which describes a "cartographer's conception of a map" and the process of transferring the cognitive realm (the "local encounter") into something which can be communicated. ⁴ In order to achieve this goal, the following process (involving the set of practices proscribed by the "world view") is outlined: selection – classification – simplification. These three steps will

result in the actual map, through which the cartographer communicates with the "map reader". The same process is valid for image production at large, by means of pictorial conventions.

According to Bruno Latour, in his article "Drawing Things Together", the aim of going out - in a scientific context - was to bring back something: "You have to go and to come back with the "things" if your moves are not to be wasted".5 Following Latour, this process took place by converting an "immobile" local encounter into something which was made "mobile" by means of documenting it. The local encounter with all its potential fuzziness- could be transformed into an "immutable" entity, something through which the traveller's world view was fixed and communicated in an understandable and comparable fashion. One of the primary means by which this "bringing back" was established was by map making, which, in the eighteenth century, was considered a quintessential way in which to gain power of the unknown.

This seeing brought back, the encounter with the Arabian reality, was the very essence of the voyage. How can we follow the transformation of the local encounter in the images? – by means of selection – classification – simplification and by means of the immobile turned mobile.

Image makers

The following contains a brief overview of the draftsmen and artists involved in the making of the images from the Arabian Voyage. The large majority of engravings in *Beschreibung* and *Reisebeschreibung* were based on drawings produced by the expedition's draftsman, Georg Wilhelm Baurenfeind (1728-1763), who died on the sea voyage from Yemen to India, and by Carsten Niebuhr. The latter was of course the sole producer of any drawings or sketches made on the journey from Bombay onwards.

As the expedition's cartographer, Carsten Niebuhr had basic skills in drawing. His cartographical training with the astronomer and mathematician, Tobias Mayer (1723-1762), was based broadly on aspects

^{4.} Morrison (2011), pp. 24-31, especially pp. 28-29 and figure 1.4.4. First published in 1976.

^{5.} Latour (2011), p. 66 and pp. 68-69. First published in 1990.

of applied mathematics. According to Niebuhr, drawing practice with Mayer focused on "Grundrisse, Situationskarten und dergleichen..."

The expedition draftsman, Georg Wilhelm Baurenfeind, was born in Nürnberg. He was the son of Michael Baurenfeind (1680-1753), an imperial notary, who was also known for his mastery in the art of calligraphy. The latter, and less familiar aspect of the professional life of Michael Baurenfeind, is likely to have exuded some influence on Georg Wilhelm's choice of profession.

Georg Wilhelm Baurenfeind was trained as an engraver. ⁸ Before relocating to Denmark, c. 1753, he contributed to the *Hortus Nitidissimis* by Christoph Jacob Trew, a series of prints of garden flowers, published between 1750 and 1792. ⁹ In Copenhagen, Baurenfeind obtained additional training at the Royal Academy of Arts in Copenhagen. He received the academy's Gold Medal in 1759.

Baurenfeind's teacher in Copenhagen was the influential Royal engraver, Johann Martin Preisler (1715-1794). Originally also from Nürnberg, Preisler was called to Denmark in 1744. Preisler's father, Johann Daniel Preisler (1666-1737), was the author of a series of instructive books for artists, which were widely distributed and reprinted throughout the eighteenth century. This could be the origin of at least parts of Baurenfeind's solid knowledge of the contemporary

rules of composition and conventions as to the rendering of perspective.

We sadly have little knowledge of Baurenfeind's work as a draftsman during the expedition. Although the Royal Instruction had specified that all the members of the expedition should keep a diary, such documents are known only from three of the members, namely Niebuhr, the philologist, Frederik Christian von Haven (1727-1763) and the natural scientist, Peter Forsskål (1732-1763). Access to how Baurenfeind managed his assignment within the expedition is therefore very limited.

The visual legacy from the Arabian Voyage also consists of the engravings of plants and animals, which Niebuhr published on behalf of his deceased travel companions, Peter Forsskål and Baurenfeind, the beautifully hand-coloured *Icones Rerum Naturalium* from 1776. Furthermore, a few sketchy drawings exist from the extensive dairy of von Haven. No sketches or drawings can be ascribed to either Forsskål or to the expedition doctor, Carl Christian Cramer (1732-1764). A small group of Niebuhr's drawings are preserved among his papers in Universitätsbibliothek Kiel and in Rigsarkivet (State Archives, Copenhagen). Most of these relate to the third volume of Niebuhr's *Reisebeschreibung*, which was published after his death. 14

The transformation from drawings to the engravings for the publications – in Copenhagen – was in the hands of at least five different engravers. It should be noted that not all engravings carry signatures. The engraver, Johann Friderich Clemens (1748-1831), was,

^{6.} Niebuhr (1803), p. 263.

^{7.} Michael Baurenfeind functioned as a teacher in calligraphy and published several works on Schreib-Kunst. See Baurenfeind, Michael, in: Allgemeines Künstler-Lexikon (1993), Band 7, p. 633. He is considered a key figure in the development of German calligraphy in the 18th century and the last of the great Nürnberger masters. See Röhrl (1992).

^{8.} Baurenfeind, Georg Vilhelm, in: Weilbach. Dansk Kunstnerleksikon (1994), vol.1., pp. 189-190. For the artists mentioned below: if not otherwise stated, see Weilbach. Dansk Kunstnerleksikon (1994-2000), alphabetical entries.

^{9.} For an example of Baurenfeind's early works, see: http://apps.kew.org/hortus/viewMeta.

do?page=87&type=ideal&chap=7. For Hortus Nitidissimis see: http://apps.kew.org/hortus/tjaden.pdf

^{10.} See for instance Preissler (1734). A 7th Edition was issued in 1774.

^{11.} Michaelis (1762), §8.

^{12.} A few letters can be traced to Baurenfeind. Three letters in Erlangen are rendered in Rasmussen (1990), pp. 94-97. These concern general subjects. A letter from Baurenfeind is preserved in Rigsarkivet (the State Archives). Tydske Kancellis udenrigske afd. almindelig del 3. Realia. Arabiske Rejse, (pakke 3-003) I,137a (18.6.1762). Here Baurenfeind briefly mentions his work on drawing some Egyptian mummies.
13. See: Hansen og Rasmussen (2005), p. 95 and pp. 268-269.
14. For examples see: Rigsarkivet (State Archives). Tydske Kancellis udenrigske afd. almindelig del 3. Realia. Arabiske Rejse, (pakke 3-003), I, 133a (inscriptions from Sinai) and Universitätsbibliothek Kiel. Nachlass Niebuhr. Cod. MS 314,VII and VIII (several drawings).

like Baurenfeind, a student of Preisler and an important figure among Danish artists of the time. Clemens was responsible for some of the plates of highest quality in the *Reisebeschreibung*. An etcher, about whom little is known, but who figure prominently in the volumes, is A.J. Defehrt (died 1774). Prior to working in Denmark, Defehrt was employed as an engraver for the French *Encyclopédie*. A Frenchman, Claude-Emanuel Martin (died 1774) dealt particularly with the plates depicting inscriptions in the *Beschreibung* and *Reisebeschreibung*. The brothers Georg (1751-1817), Meno (1752-1833) and Peter (1754-1804) Haas, further students of Preisler, also contributed. Finally, the signature of Andreas Heckel (c. 1747-1799) can be noted.

Prior to publication, the images produced by Baurenfeind and Niebuhr were subjected to a certain selection process. Niebuhr mentions drawings by Baurenfeind that were not reproduced in his books.¹⁷ In one instance, the illustration was deemed superfluous as a similar depiction was already provided by Frederik Ludvig Norden (1708-1742), whose volumes *Voyage d'Egypte et de Nubie*, 1755, served as a constant point of reference for the expedition. Norden was a Danish naval officer, who travelled in the Nile Valley in 1737-1738. Allusions to further unpublished drawings also occur in the journal of von Haven.¹⁸

Among the illustrations made by Baurenfeind and Niebuhr there are traces of an alteration process, in which several states of the engravings were produced. An interesting example is an engraving, which possibly originates from the estate of the above-mentioned J.F. Clemens.¹⁹ In this, presumably first state of the image – a depiction of Carsten Niebuhr in Yemenite

dress - Niebuhr is shown with a clean-shaven face, while the final version, as printed in *Reisebeschreibung*, depicts him with a full beard.²⁰

The copper plates produced for Niebuhr's publications during his lifetime were destroyed in the fire of Copenhagen in 1795. The larger bulk of drawings brought back from the expedition was most likely destroyed at the same time. It is therefore unfortunately not possible to compare the process of transformation from drawings to prints in any systematic fashion. But the existing examples of drawings and sketches in the State Archives and in the Universitätsbibliothek Kiel generally seem to demonstrate a close correspondence between drawings and prints.

The expenses for the production of the copper plates were covered by the Danish Crown. The printing of the published volumes was at Niebuhr's personal expense.²²

Approaching the images: motif and distribution

We might approach the illustrations in *Beschreibung* and *Reisebeschreibung* through a paradox. It is fair to assume that these images were to some degree intended to document answers to the questions, which Michaelis had formulated for the expedition. ²³ Yet, only a few of them come close to doing exactly that. There are no images of the many species of locusts that were the urgent subject of several questions, and readers would also look in vain for images of lepers or flying fish other subjects mentioned by Michaelis.

The plates in the four volumes are unevenly distributed, as can be seen in the table below. In *Beschreibung*, Niebuhr's formal report in reply to Michae-

^{15.} For examples, see Niebuhr (1774), Tab. XXIX, "Abbildung der Araber in Egÿpten", and Tab. LIX, "Abbildung einer Araberin in Tehâma".

^{16.} Pinault-Sørensen and Sørensen (1993).

^{17.} See for instance Niebuhr (1772), p. 61 and p. 81.

^{18.} Von Haven mentions a sketch of the royal caste of Kronborg and renderings of Egyptian antiquities observed in Alexandria, Egypt. Hansen and Rasmussen, (2005), p. 64 and p. 244

^{19.} Statens Museum for Kunst, inv. no. KKS10839.

^{20.} Niebuhr (1774), Tab. LXXI, "Kleidung der vornehmen Araber in Iemen".

^{21.} Niebuhr (1816), p. 69.

^{22.} Niebuhr (1816), p. 43.

^{23.} Michaelis' questions was first put to print in 1762 – thus after the departure of the expedition in January 1761. See Michaelis (1762). However, the members of the expedition were made familiar with some of the questions on departure and along the travel route. See Niebuhr (1772), pp. XVI-XVII.

Typological distribu- tion of motifs	Beschreibung, 1772: 24 plates	Reisebeschreibung, 1774: 72 plates	Reisebeschreibung, 1778: 52 plates	Reise durch Syrien, 1837: 13 plates
Art and architecture	8%	7%	43%	7%
Folklore	21%	28%	6%	7%
Geography	29%	38%	37%	86%
Philology	42%	27%	14%	0%

lis's questions, the total is a mere 24 plates. The first volume of *Reisebeschreibung* from 1774 contains 72 plates, while the following two volumes have 52 and 13 plates, respectively.

A typologically overview of the motifs is also given in the above table. Here the plates have tentatively been divided into four categories, namely: art and architecture, folklore, geography and philology. Art and architecture includes for example the illustration of the city gate "Bâb el fitûch" in Cairo, Fig. 1, and the sculptural decorations in the Hindu temple of Elephanta in India.24 Folklore includes so-called genre scenes, i.e. images of local peoples and manners and customs, Figs. 2-4. Geography covers any kind of map, ground plan or prospect. The category of philology includes representations of any form of inscriptions, be that ancient Egyptian stone carvings, manuscripts or coins. The absence of images within the category of flora and fauna is noticeable. The before-mentioned Icones rerum naturalium (1776) was dedicated to this subject. However, this work, as was the case of Beschreibung and Reisebeschreibung, also shows equally little direct correspondence with the question raised by Michaelis.25

Some general observations can be made. Quantitatively, the *Beschreibung* is the least illustrated of the volumes. The distribution of motifs in the volume is noteworthy for a high percentage of images within *philology* – primarily Arabic inscriptions. As to the *Reisebeschreibung*, it can be noted that the first volume is

Inner narration

If seen as a collective body, the images in the four printed volumes relate the inner developments of the journey. Factors such as artistic abilities, personal interests – and, in the end, sheer survival – have decisively influenced the choice of motifs and the style and quality of the artistic work that was produced during the expedition.²⁶

In the early images, such as "Prospect der Stadt Damiât", Baurenfeind's energy and artistic optimism are easily detectable. ²⁷ In turn, his absence can be clearly noted in the later stages of the journey. The images from this period are evidently lacking in grand composition and in artistic imagination. The first volume of *Reisebeschreibung* contains fifteen plates entitled "Prospect", while in the second volume this number is drastically reduced to a mere two plates. By comparison, Baurenfeind's prospects are far more complex, as to composition, depth and detail, than are those of

decisively the most varied and the most richly illustrated. The full scope of Baurenfeind's abilities as an artist is demonstrated here. Furthermore, the first and the second volume of *Reisebeschreibung* have an almost identical distribution of plates with a geographical motif, while folklore is more predominant in the first volume. The third volume, which was posthumously published, consists almost exclusively of maps and ground plans.

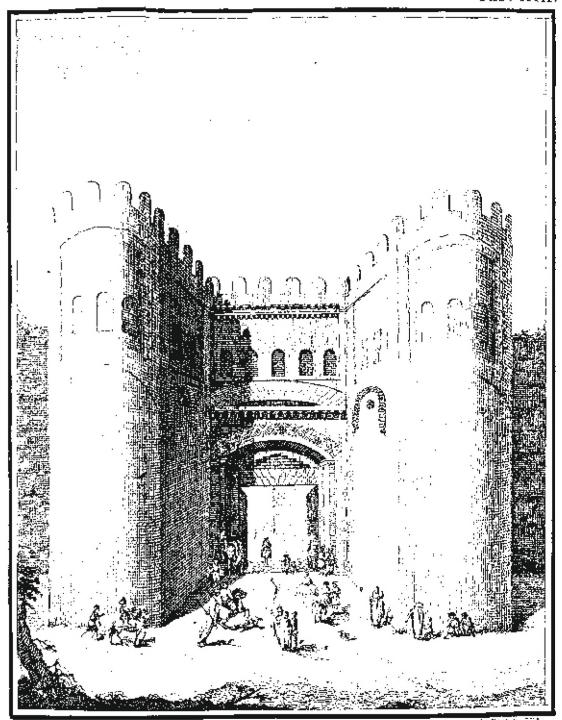
^{24.} Niebuhr (1774), Tab. XIII and Niebuhr (1778), Tab. III-XI.

^{25.} Michaelis (1762).

^{26.} See also Weidner (2005), pp. 117-118.

^{27.} Niebuhr (1774), Tab.VIII.

 $Tab: \mathbf{XIII}.$



Bab et filuch, ein Thor zu Kahira .

Fig. 1. "Bâb el fitûch". Niebuhr (1774), Tab. XIII.

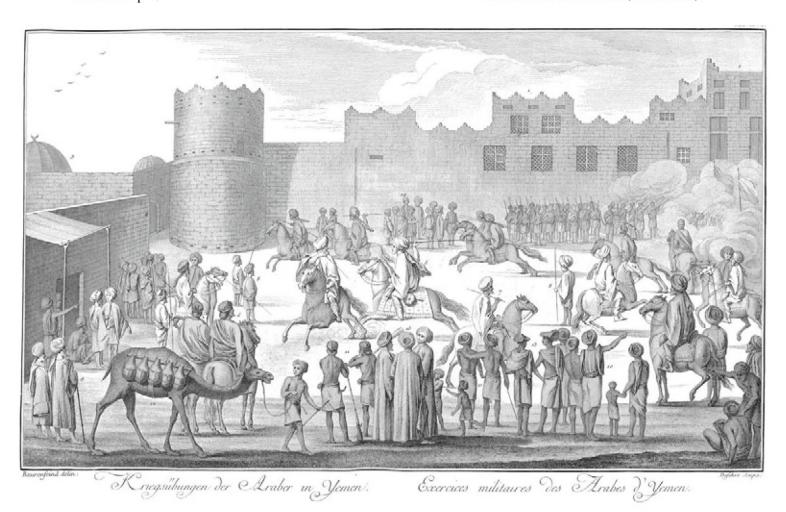


Fig. 2. "Kriegsübungen der Araber in Yemen". Niebuhr (1772), Tab. XVI.

Niebuhr. Furthermore, there is a marked decline in the number of illustrations within the category of folklore, which often included the rendering of the human form – something which Niebuhr's training had not prepared him for.

Overall, the general quality of the images is lower than in the beginning of the journey and problems with the use of perspective become noticeable. Niebuhr's illustrations from Elephanta Island can serve as an example. Niebuhr chose to document a rock-cut temple at this temple site. The building complex consists of deep pillared halls with decorated walls in high raised relief. Niebuhr presents an overview of the structure by means of a ground plan, while the remaining images consist of sections of wall scenes

with little indication of the spatial relationship between them.²⁸

The Mathematischer Atlas from 1745 by Tobias Mayer, Niebuhr's tutor in cartography, demonstrates a clear focus on how to measure heights and distances. However – not unexpectedly – the volume offers little assistance on how to actually convey these measurements in a pictorial form.²⁹ This corresponds with

^{28.} Particularly noticeable on Tab.V in Niebuhr (1778).
29. Mayer (1745). Available online at ECHO, European
Cultural Heritage Online: http://echo.mpiwg-berlin.mpg.de/
ECHOdocuViewfull?url=/mpiwg/online/permanent/
library/329WTZRX/pageimg&mode=imagepath&viewMode=thumbs

some the problems which are evident from Niebuhr's visual documentation on the part of the journey that followed after the death of Baurenfeind.

Readers and images

The distribution of images in the four publications also seems linked with reader targeting. From his introductory words, it is clear that Niebuhr had two categories of readers in mind. Scholars were the primary objective for the *Beschreibung*. The *Reisebeschreibung*, on the other hand, potentially had a wider spectrum of readers, including those reading "merely for the passing of time" – "bloss zum Zeitvertreib" as Niebuhr formulates it.³⁰

The relatively low percentage of images in *Beschreibung* has already been pointed out. The reason for this is partly to be found in the very planning of the expedition itself. The expedition was, as has been pointed out by Niels Peter Lemche, entrenched in a continuous conflict between the Biblical foundations expressed in Michaelis's questions and the scientific worldview(s) held by the participants.³¹ The latter represented a plurality of disciplinary approaches, as is also evident from the structure and formulations of the Royal Instruction.

Many of the questions posed by Michaelis in *Fragen* proved difficult to approach in practice – be that in either written or visual form. Some anxiety about this discrepancy between the initial intensions and the final result is addressed directly by Niebuhr. He explains that the geographical descriptions included in *Beschreibung* was intended to boost the publication and also in order to compensate for the fact that Michaelis had not added in any way to the first draft of replies, sent to him for review. ³² The printed answers were subsequently unaccompanied by any scholarly commentary from the very man who had formulated and posed them. Assuredly, Niebuhr's geographical observations did add substantial weight both visually and textually.

In a similar fashion, the high quantity of images in the category of philology found in Beschreibung, can most likely be linked to its status as a formal report. A substantial amount of Michaelis's questions rested on elucidating passages from the Holy Scriptures, and the retrieval of inscriptions had a prominent place in the Royal Instruction.³³ The many illustrations of inscriptions in Beschreibung perhaps represented an attempt to adapt the visual appearance of the book to the scope of the expedition. Also, images of Kufic inscriptions and coins indicated scholarly substance and brought Niebuhr's work within the field of interest of not only Orientalists, but also historians and antiquaries at large. The illustrated inscriptions had even been proof-read. Niebuhr repeatedly refers to how the esteemed scholar Johann Jakob Reiske (1716-1774) had assisted him in deciphering the depicted Arabic inscriptions, and how Reiske's insights by far superseded the capacities of any of the local (Arab) scholars which Niebuhr had approached earlier.34

Compared to *Beschreibung*, the *Reisebeschreibung* was likely to appear to readers as a more broadly accessible work. The narrative of the day-by-day journey of the traveller(s) and the variation of themes and topics which are presented are lighter and of more general interest. These agreeable qualities were also expressed by means of the illustrations, which are, in comparison with those of the *Beschreibung*, both more numerous and more diverse. This holds especially true for the volumes from 1774 and 1778.

By genre, the *Reisebeschreibung* followed a contemporary trend. The number of illustrated travel accounts had risen markedly since the beginning of the eighteenth century. In his publications, Niebuhr has frequent references to illustrated works by fellow travellers such as Jean Chardin, Cornelis de Bryun, Frederik Ludvig Norden, Richard Pococke and Thomas Shaw among others. As the century progressed, many more would follow.

^{30.} Niebuhr (1774), p. xii.

^{31.} Lemche (2009), p. 9.

^{32.} Niebuhr (1772), p. xix.

^{33.} See Michaelis (1762). For references to the copying of inscriptions, see § 12 and §§ 42-43.

^{34.} Niebuhr (1772), p. 96.

This blooming of travelogues coincided with some more general changes in reading patterns which occurred in the second half of the century. These changes, sometimes labelled the "reading revolution" of the eighteenth century, caused a wider public to embrace reading as an objective for personal education and cultural stimulation. Although travel accounts did not form the core of this new surge in private reading, Niebuhr seemed well aware of its potentials.³⁵ His remark on *Zeitvertreib* and the overall composition of the *Reisebeschreibung* point decisively in this direction.

Documenting the local encounter

How can we define the categories of images according to the function they have in Niebuhr's books?³⁶ The motifs within the category of folklore have an intimate feel. By means of depicting a woman from the "Caffegebürge" of Yemen, the reader would get an impression of the life encountered by the travellers. Such genre scenes, Figs. 3-5, follow well-established pictorial conventions and connect with earlier images like those of Athanasius Kircher's China illustrata from 1667 and many others.37 The other type of illustrations within the category of folklore consists of careful depictions of shoes, hats and tools of contemporary life. Such instructive and classificatory illustrations are typical of eighteenth century imagery in both idea and conception. They carry an obvious kinship with, for instance, the plates in the French Encyclopédie and with antiquarian illustrations of the period.

The French *encyclopedists* are known to have likened the ordering of knowledge - by means of classification, overviews and taxonomies - to geographical practices. In this context, map making was

considered to hold a particular high status. As formulated by Matthew H. Edney in "Reconsidering Enlightenment Geography and Map Making" from 1999, the period considered the compilation of geographical maps as the "epitome of encyclopedic knowledge".³⁸

Maps, ground plans and prospects form the most constant element in the visual documentation from the Arabian Voyage. Niebuhr used his map making skills continuously and towards the latter part of the journey it became the dominant feature. As noted by Daniel Weidner, Niebuhr was at this point inclined to use the bird's eye view to such a degree that ground plans and prospects become almost one and the same, turning everything into maps.³⁹

By means of maps, that which was encountered – the individual, flimsy "localness" – was transformed into a highly abstract reproduction. The maps and ground plans were standardized information put to paper and they were "spoken" in a language which was internationally understood and often fluently translatable.

By means of maps, all the villages and coastlines could be directly compared with *any* other location on the globe. At the same time, the maps do not render anything that could actually be seen. Rather than rendering the local encounter objectively, maps are abstract images imbued with an "optical consistency" – as formulated by Latour.⁴⁰

Overview and detail are constantly interchanging in the *Beschreibung* and the *Reisebeschreibung*. In their published form, the entirety of images manages to stress the ability of Niebuhr as author, mastering everything from grand-scale maps of entire regions to systematically arranged illustrations of Oriental shoes.

^{35.} For a brief general account of reading in the 18th century, see Outram (2006), pp. 68-89. See also Wittmann (2010), pp. 39-51 and especially pp. 47-50.

^{36.} Here I draw on the analysis offered by Weidner (2005). 37. For Kircher, see for instance http://digitalgallery.nypl.org/nypldigital/id?826819 or http://www.stanford.edu/group/kircher/cgi-bin/site/?attachment_id=733

^{38.} Edney (1999), p. 173. See also Burke (2000), p. 115. 39. Weidner (2005), p. 117. The example given by Weidner is Niebuhr (1837), Tab. XI, "Grundriss und Prospect der Stadt Kara hissâr".

^{40.} Latour (2011), p. 69.

Tab.LIX,



Abbildung einer Araberin in Tehâma.

Fig. 3. "Abbildung einer Araberin in Tehâma". Niebuhr (1774), Tab. LIX.

Tab .L XIV.



Bourenfeind del:

I f (Temms 3c)

Abbildung einer Araberin auf dem Caffegeburge .

Fig. 4. "Abbildung einer Araberin auf dem Caffegebürge". Niebuhr (1774), Tab. LXIV.

Seeing brought back?

By means of a series of pictorial conventions, each pertaining to their individual training, Baurenfeind and Niebuhr had transformed a series of *immobile* encounters into *mobile* images. But to what degree do the images record an actual local encounter?

Andreas Isler of Universität Zürich has demonstrated that, although the onset is a documentation based on "solely on own observations", as Niebuhr states41, there are several instances of motifs and compositions which can be said to refer to earlier depictions.42 These particular images, all made by Baurenfeind, clearly express the existence of codified pictorial conventions. As such these images can perhaps best be termed as Orientalizing. In one instance, regarding the image of a Banian in Mocha, Fig.5, Niebuhr allows himself to hint at the "copying" process, and the subsequent absence of direct empirical observation, as he apologizes for the lack of perspective in between the main elements of the composition, in this case the standing man and the bovine creature behind him.⁴³ Isler has very convincingly pointed to the earlier A Display of two forraigne Sects in the East Indies from 1630 by Henry Lord as a model for this composition, Figs. 5 and 6. There is thus much variation with regard to the level of empirical observation in the images. In some cases, Niebuhr willing admitted that the images were not based on personal observation, but on the basis of already existing images. This was the case of the images of the mosques in Mecca and Medina.44

A final, and hitherto less addressed group, consists of three images – none of which are from the hand of neither Baurenfeind nor Niebuhr. Instead, these images were conceptualized and produced in Copenha-

gen for the sole purpose of supplementing the already existing illustrations. According to the signatures on the engravings, two are made by Peter Cramer (1726-1782) and one is by Thomas Bruun (1742-1800).⁴⁶

Peter Cramer functioned as a theatrical painter at the Court Theatre in Copenhagen from the year 1769 and until his death. Thomas Bruun was appointed his successor. These two artists must rightly be added to the manifold list of draftsmen and artists that contributed to the visual documentation of the Arabian Voyage.

The three images, invented in retrospect, by Cramer and Bruun, all occur in the first volume of the *Reisebeschreibung*. One engraving is a capriccio-style rendering, depicting a group of Egyptian antiquities, Fig. 7. This image is followed, later in the volume, by a depiction of the audience hall in Sana, where the expedition was received by the local imam in July 1763, Fig. 8. The last image is the familiar portrait of Carsten Niebuhr in Yemenite dress, Fig. 9.⁴⁷ The signatures on the engravings serve as clear telltales, but there is another even more obvious indication as to their disparate status: their composition and motif simply do not fit the established visual patterns of the remaining illustrations.

The capriccio occurs as the last image in a series of depictions of hieroglyphic inscriptions, made by Niebuhr in Cairo as part of a philological documentation.⁴⁸ These images demonstrate an otherwise startling consistency. Niebuhr's documentation focuses solely on the inscribed surfaces of the objects while it completely refrains from rendering them as three-dimensional entities. This stands in marked contrast to the more antiquarian mode of rendering employed in the scenographic capriccio.

The portrait of Niebuhr in Yemenite dress is seemingly comparable to the other depictions of local inhabitants from Yemen, with their single standing figure in a neutral landscape, Fig. 9 and 3 - 5. Yet, the reader is left to wonder at the implications of the dra-

^{41. &}quot;...bloss aus eigenen Beobachtungen..." Niebuhr (1772), p.

^{42.} Isler (2008), figs. 37-38, 39-40 and 41-42. Unpublished paper. I wish to extend my gratitude to the author for his permission to let me make use of this material.

^{43.} Niebuhr (1772), p. 67.

^{44.} Niebuhr (1772), Tab. XXI and XXII.

^{45.} I first drew attention to these images in Hansen (2004).

^{46.} For Cramer, see Neiiendam (1994).

^{47.} Niebuhr (1774), Tab. XLII, LXIX and LXXI.

^{48.} Niebuhr (1774), Tab. XXX-XLII.

Tab.III.



Kleidung der Banianen zu Mochha.

Fig. 5. "Kleidung der Banianen zu Mochha". Niebuhr (1772), Tab. III.



Fig. 6. Henry Lord, A Display of two forraigne Sects in the East Indies, 1630. Frontispiece.



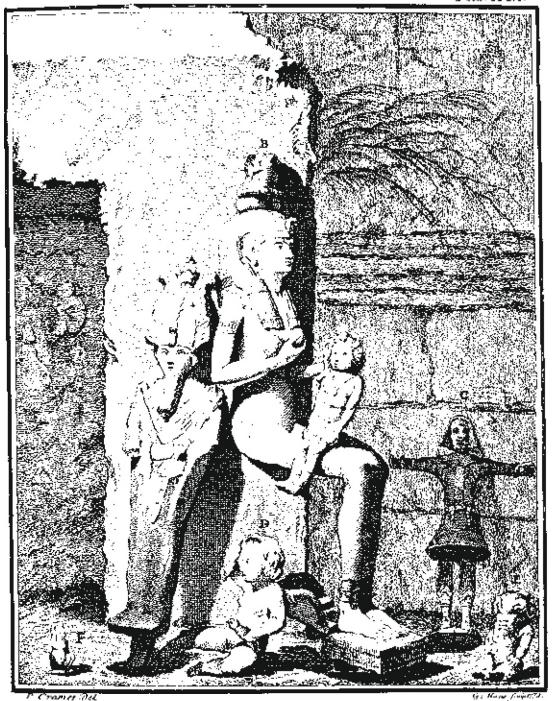


Fig. 7. Untitled, showing objects acquired by Niebuhr in Egypt. Niebuhr (1774), Tab. XLII. Most of the depicted objects are now held in the Collection of Classical and Near Eastern Antiquities, The National Museum of Denmark.

matic tableau unfolding in the background. What is the relationship between the tranquil posture of Niebuhr and the feud taking place in the immediate background? Is the scene merely included in order to demonstrate the usage of the particular knife in question or is it perhaps rather an illustration of the presumed "habits" of the East?

The engraving of the audience hall in Sana draws attention to itself with its vast proportions and dwarfed human figures, Fig. 8. The depiction borders on being an architectural fantasy. The dramatic use of light and shadow and the ominous atmosphere is rather different from the restrained and frontal mode of rendering seen in other related images. The depiction of the audience hall most likely has as its starting point the written description by Niebuhr, as there is a very close correspondence between the few descriptive details of the interior and what can be seen on Cramer's image. ⁴⁹ The image is a space greatly envisioned – but not a space seen.

These retrospective images help to clarify the particulars of the image production from the Arabian Voyage in general. The images made by Cramer and Bruun are characterized by a suggestive quality. They appear as if a secondary layer has been inserted – a layer, which is unrelated to the *in situ* documentation by the travellers. In their very essence, these retrospective images helped to recreate a situation left unregistered in the field. Such a filling out of lacunae, was a path that Niebuhr had left untrodden in the earlier *Beschreibung* and which was not chosen in the later second volume of *Reisebeschreibung*.

While the suggestive layering of the images by Cramer and Bruun touches on the curious and that which can be wondered at, they also draw on elements of exoticism à la turque and on preconceived notions of "the Orient". This is particularly evident in the rendering of Niebuhr, with its emblematic illustration of the ill-tempered Orientals.⁵⁰ Notions of the

Orient as stagnant are perhaps also present in the capriccio with its nostalgic longings for a bygone world, while the rendering of the audience hall seem to play with ideas of the fabled ceremonious opulence of the Orientals. As theatrical painters, Cramer and Bruun were most likely very familiar with conceptualizations of an Orient imagined, and their particular trade held a well of traditions to draw on, both within the framework of the stage plays and masquerades à la turque.⁵¹

The imaginary images by Cramer and Bruun obtain a contrasting quality, if seen in relation to the drawings made by Baurenfeind and Niebuhr. By mere comparison, the latter automatically becomes imbued with the appearance of authenticity and of something honestly observed – although these images are of course also, as pointed out in a study by Elisabeth Oxfeldt, to be considered from the perspective of cultural representation rather than objective and unfiltered observation.⁵²

A similar interplay between primary and secondary images can be observed in another publication to which Peter Cramer also contributed, namely the *Voyage d'Egypte et de Nubie* from 1755 by F.L. Norden. This particular travelogue consists of more than 150 engravings, primarily of ancient Egyptian monuments, seen and documented by Norden. Upon publication, the work was equipped with a series of vignettes, some of which was designed by Peter Cramer. In these vignettes components from seventeenth-century antiquarian depictions are woven together with elements of Egyptomania to give a burlesque effect. These layered compositions stand in marked contrast to the *in situ* documentation of Norden's own images.⁵³

^{49.} Niebuhr (1774), p. 413.

^{50.} Similar perceptions were also present in the documents relating to the Arabian Voyage, as seen in a draft of the Royal Instruction copied by F.C. von Haven. Here § 10 repeatedly

reminds the travelers not to entice the well-known "Oriental vindictiveness". Rasmussen (1990), pp. 66-67. The Royal Instruction given in Michaelis (1762) is abbreviated and does not include these passages.

^{51.} Landweber (2005) and Holm (2010).

^{52.} Oxfeldt (2010), pp. xii-xiii.

^{53.} For a discussion of these vignettes in context, see Hansen (2012), pp. 222-227.

Contemporary depictions – a brief comparison

What characterizes the mode of depiction and compositions of the images produced by Baurenfeind and Niebuhr? A way of approaching the images could be by means of a comparison with contemporary examples taken from the visual documentation of European cities, such as the work by Vasi and from contemporary travelogues. Although not identical in nature, these examples can nevertheless help address traits which are either manifest or absent in the image production by Baurenfeind and Niebuhr.

An aspect to be considered is the choice of perspective. In the artist Guiseppe Vasi's (1710-1782) well-known *veduti* of Rome, published in the mid-eight-eenth century, seven different ways of documenting the cityscape can be determined: ⁵⁴ *true perspective*, a *widened perspective* ("open-book" view), *telescoped* view (bringing elements together on one plane), *composite* or *collage* view (multiple angles brought together), the *capriccio* view (imaginative), the *embedded* view (a view-point which is physically impossible) and finally elevation or *bird's eye view*.

Reflecting on the images by Baurenfeind and Niebuhr and their way of rendering land- and cityscapes it can be observed that both the widened perspective and the bird's eye view were commonly used. Overview corresponds well with travelling and being on the move, and Niebuhr's many ground plans were indeed often the result of brief encounters. Nevertheless, overviews also exude that the observer is in control of things, and they communicate a sensation of totality and of bringing much back.

Another aspect to be considered is that of setting and choice of motif. It has been suggested that Vasi's renderings of the sights of Rome can be interpreted on the background of the scenographic conventions outlined by Sebastiano Serlio (1475-1554) in the sixteenth century. Serlio wrote a highly influential architectural treatise, in which he devoted a section to the design of theatres and stage sets. With reference to Classical models, Vitruvius in particular, Serlio outlined three types of backgrounds for the stage play: the tragic, the comic and the satirical background. Each of these created an illusionistic backdrop for the actors using symmetrical arrangements and a central perspective.

The tragic background consists of an orderly street, lined with palaces and imposing commemorative monuments – a setting where noble and civilized deeds could take place. The comic background was to be composed in a more random and informal fashion and with such elements as private dwellings and perhaps an inn or a brothel. A setting fit for ordinary and common people. Finally, the pastoral background would contain woods or rural sceneries with cattle and shabby sheds. This was suitable for the creatures of nature, such as satyrs, and to less polished or dignified subjects.

In the case of Vasi, the images of Rome were viewed as a form of tableau with reference to the Serlian tradition. What if this is translated into the image production from the Arabian Voyage? It seems that in particular the pastoral setting is readily identified. The *Beschreibung* opens with an image of a Yemenite hut in the countryside, Fig. 10, and the third plate in the volume depicts the Banian man in a decisively pastoral landscape, Fig. 5.⁵⁷ In general, the renderings of the local inhabitants in Niebuhr's volumes focus on such humble figures.

There is no systematic documentation of local rulers or persons of religious or military importance – subjects fit for the use of a tragic background. One of

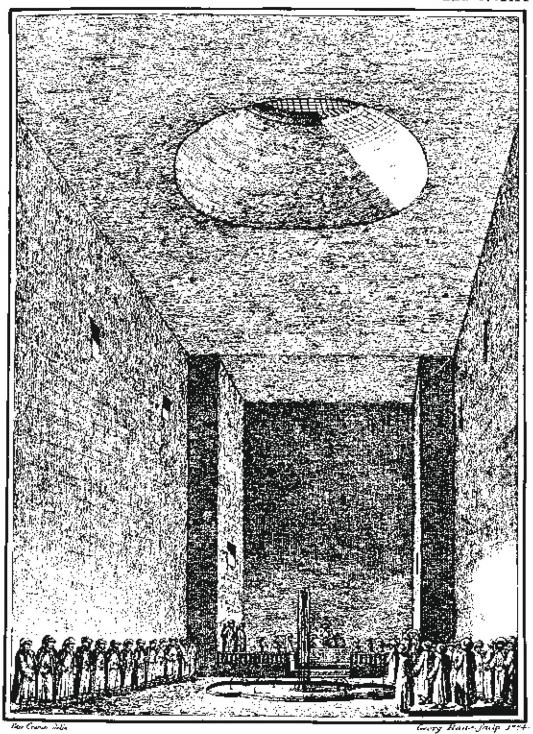
^{54.} These categories are based on the work done on Guiseppe Vasi by Jim Tice, Erik Steiner, Allan Ceen, and Dennis Beyer, Department of Architecture and InfoGraphics Lab, Department of Geography, University of Oregon. See: http://vasi.uoregon.edu/interpreting_types.html

^{55.} See "City as Theatre" at: http://vasi.uoregon.edu/interpreting_theatre.html

^{56.} Serlio's treatise on architecture, (often referred to as *L'Architettura*), published from 1537 onwards, was fundamental to a renewed understanding of (and practical use of) Classical architecture, not only in the context of scenography, but in architectural theory as a whole.

^{57.} Niebuhr (1772), Tab. I and III.

Tab.LXIX



Vorstellung der Audienz bey dem Imam zu Sand Fig. 8. "Vorstellung der Audiens bey dem Imam zu Saná". Niebuhr (1774), Tab. LXIX.

Tab.LXXI.



Kleidung der vornehmen Araber in Iemen.

Fig. 9. "Kleidung der vornehmen Araber in Iemen". Niebuhr (1774), Tab. LXXI.

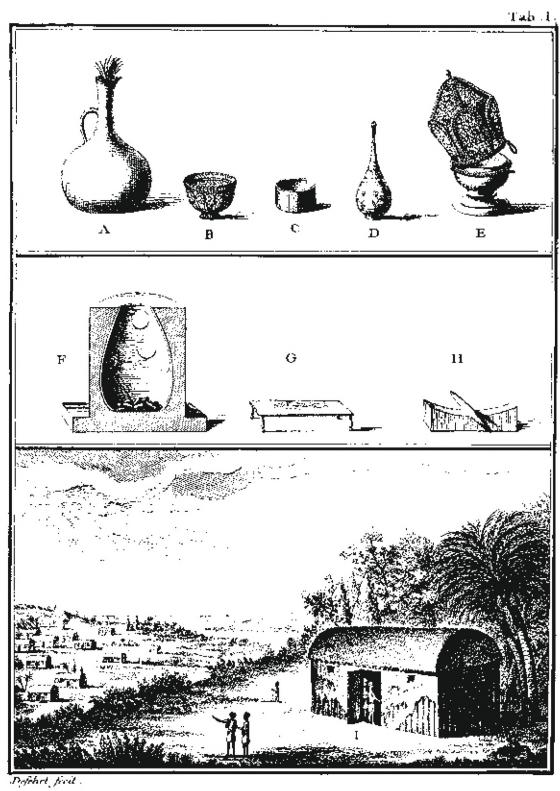


Fig. 10. Untitled, showing various Yemenite utensils (top row: coffee pot, two cups, flask for rose water and incense burner; second row: oven, seat and grinder) and, below, a Yemenite hut in the countryside. Niebuhr (1772), Tab. I.



Fig.11. "Prospect der Stadt Marseille". Niebuhr (1774), Tab. II.

the few befitting candidates for this type of setting, this time in the *Reisebeschreibung*, is the rendering of a Cairene city gate, the "Bâb el fitûch", complete with a dwindling perspective, Fig. 1.58 The expedition spent close to a year in Cairo (from November 1761 until August 1762), yet its gardens, squares, bridges and public and religious buildings – all the components that make up the urban landscape of such a city – are almost absent from the documentation. The same broadly applies for the other cities encountered by the expedition. Another single-standing example is found in *Beschreibung*, a double-page spread, depicting "Kriegsübungen der Araber in Yemen", where the house of the Dola and other buildings in the town of Luhayyah, are shown in the background, Fig. 2.59

Any systematic mapping of the stately buildings of the Orient, as is otherwise known from an European context, such as the *Vitruvius Britannicus* from 1715-31 or the Danish equivalent, *Den danske Vitruvius*, 1746-49 was clearly not central to Baurenfeind and Niebuhr's approach. Both the *Vitruvius Britannicus* and *Den danske Vitruvius* had at its heart the documentation of the architectural capacities of a nation – the British Isles and Denmark, respectively. The purpose of these books, especially the *Vitruvius Britannicus*, was that of supplying models and references for future architectural building works.

Niebuhr did pay attention to architectural structures, but these were definitively historical in nature, as evidenced from his documentation of Elephanta, Persepolis and others. Seen through the perspective of the Serlian categories, the impression gained from the images from the Arabian Voyage is that of a slightly backwards, rural society, much like the Biblical past Michaelis had hoped to encounter.

Baurenfeind and Niebuhr's images generally refrain from rendering any specific historical narrative. This contributed to their appearance as a scientific documentation. What is documented in the images is the local encounter, not the traveller *in it*. The travellers

^{58.} Niebuhr (1774), Tab. XIII.

^{59.} Niebuhr (1772), Tab. XVI.

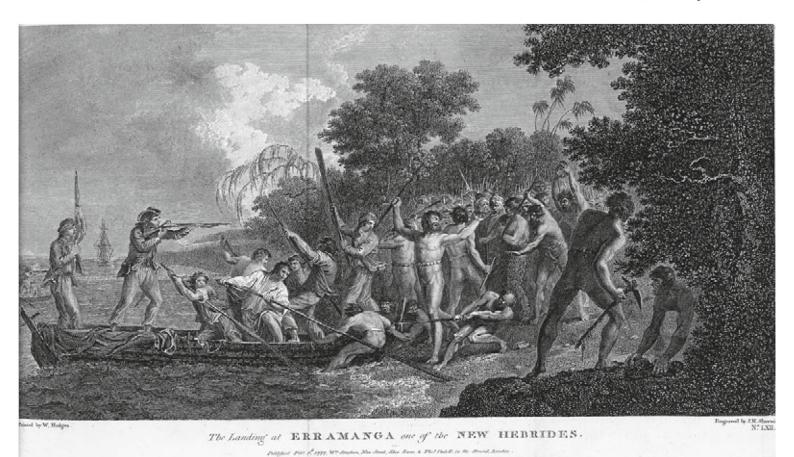


Fig. 12.William Hodges: The Landing at Erramanga, one of the New Hebrides, 1777. Engraving by John Keyes Sherwin.

on the Arabian Voyage are reclusive and are hardly ever seen. A prospect from Marseille most likely renders three of the expedition members on reconnaissance, although their identity is left unmentioned by Niebuhr, Fig. 11. ⁶⁰ A second depiction, this time from Luhayyah, has three of the travellers – very discreetly – incorporated into the composition as "Drey von unserer Gesellschaft in türkischer Kleidung", Fig. 2. ⁶¹

By comparison, the artist, William Hodges (1744-1797), who accompanied James Cook on his second voyage in 1772-1775, gave the travellers a prominent role in his documentation, Fig.12. ⁶² As Cook's fame

grew, so did the inclusion of his person in the visual narrative. John Webber (1751-1793), who was the artist on Cook's third and final voyage, frequently focused on the figure of Cook and the other travellers and on specific events on the journey – including the slaying of Cook by local inhabitants of Hawaii. ⁶³ Such interaction between the observer and the observed is fundamentally alien to the images from the Arabian Voyage.

The impression gained from the plates in *Beschreibung* and *Reisebeschreibung* is not easily summarized. The

^{60.} Niebuhr (1774), Tab. II.

^{61.} Niebuhr (1772), Tab. XVI, p. 213.

^{62.} Hodges' interest in the practices of his fellow travelers is noted by Bonehill (2004a), p. 74. For an example see Bonehill

⁽²⁰⁰⁴b), cat. 35 and fig. 52, The Landing at Erramanga, one of the New Hebrides.

^{63.} See for instance: http://www.ourspace.tepapa.com/media/163



Fig. 13. "Dress of the women in the back parts of Yemen". Niebuhr (1792), Vol.1, p. 309.

plates, the "seeing brought back", demonstrate a variation in terms of motifs, as expressed in the four categories, art and architecture, folklore, geography and philology. However, the selection of the motifs cannot be said to be systematically controlled or governed by any stringently applied method and they do not relate in any formal fashion to the questions posed by Michaelis.

The most predominant feature is Niebuhr's relatively uniform documentation of the cities and settlements encountered on the journey. This documentation – which was essentially fictive in its visual form – served to make the reader readily familiar with the Orient and the Biblical landscape. These images represent measurable and factual entities, which therefore could be mapped and made "mobile". This idea of a world made familiar and recognizable was constantly coupled with images which portrayed the Orient by means of another set of well-tried pictorial models and – at least to some degree – codified motifs.

According to Michaelis the history of Yemen "steiget bis in die allerältesten Zeiten hinauf." The visual portrait as manifest in Niebuhr's four publications indeed has a tendency to favour motifs entrenched in a sense of nostalgia or historical longing – expressed via such features as ancient inscriptions, scattered ruins and the pastoral life of simple and honest people.

It might be argued that although Baurenfeind and Niebuhr's images did not reflect Michaelis's questions by motif, they did after all – by their general mood and setting – fulfil some of the preliminary expectations of the expedition.

Epilogue

Based on the way Niebuhr arranged text and image, page by page, there can be little doubt that he considered the images a vital part of his publications. Niebuhr also facilitated an instructive list for the bookbinder as to where the plates were to be inserted, in order to ensure them to interact properly with the written description.

The French edition of the *Reisebeschreibung* from 1776-1780, *Voyage en Arabie et en d'autres pays circonvoisins*, repeats the exact number of plates which appeared in the German first edition. ⁶⁵ Yet, by the time of the English edition *Travels through Arabia*, and other countries in the *East* by Robert Heron from 1792, a dramatic reduction has occurred. ⁶⁶ Only a small handful of poorly redone plates – including a map made by "Caspar Niebuhr" – made their way into the publication. Some plates have even been "glued together" by means of combining motifs from several plates into one (Fig. 13, a combination of the motifs in Fig. 3-4).

Niebuhr's original intentions had been watered down dramatically in Heron's version. Although unfortunate, such disregard as to the visual documentation is by no means an uncommon occurrence in the history of (re)printing of travelogues and in the history of illustrated scholarly literature as a whole.

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^{64.} Michaelis (1762), vorrede, p. [a6].

^{65.} The French volumes consulted here are by printers S.J Baalde, Amsterdam and J. van Shoonhoven & Comp., Utrecht. (Collection of Classical and Near Eastern Antiquities, The National Museum of Denmark).

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Carsten Niebuhr's Reply to the French Academy: A Newly Discovered Memorandum from 1768

Michel-Pierre Detalle and Renaud Detalle

Abstract

The paper reviews Carsten Niebuhr's relations with the French Académie des Inscriptions et Belles-Lettres to which he in 1768 sent a memorandum with his responses to questions submitted to the Danish expedition to Arabia by the French Academy. The memorandum was dated 2nd of September and consists of 20 pages in folio; it was received by the Academy on the 18th of November 1768, but never published. Due to subsequent theft of the document it disappeared and was forgotten until the authors rediscovered it in the French Bibliothèque nationale in 2001. Some of the contents of the memorandum are described together with the circumstances associated with its reception, nearly coinciding with a visit by King Christian VII to the Academy on the 3rd of December.

On his way back to Denmark, after seven years of travel during which all the other members of the Royal Danish Expedition to Arabia Felix (Yemen) had died, the lieutenant des ingénieurs Carsten Niebuhr ("Niebuhr" henceforth, 1733-1815) visited Göttingen to meet Professor Michaelis. The latter was the man behind the expedition and its scientific mentor. He had by then given up all hope of any scientific outcome from the expedition, having heard of von Haven's death. As a philologist von Haven's main task was to look for the Arabic words for animals and plants and to identify links with Biblical vocabulary in the original Hebrew and Aramaic versions; religions were also an important point to him. Yet, once Michaelis had met Niebuhr, whose original responsibility was astronomy and cartography, and heard him speak about the huge amount of work he had accomplished in many other disciplines, including those that came under the responsibility of von Haven, Michaelis understood that Niebuhr was in a position to provide much of the information that had been expected from von Haven.

Michaelis was so impressed by Niebuhr that he proceeded to write to Bernstorff, the Danish chancellor and foreign minister, to share his discovery and to recommend giving Niebuhr all necessary support to allow him to write his account with sufficient resources.

After his return to Copenhagen on 20 November 1767, Niebuhr had to settle in a country he did not know (he had arrived in Copenhagen for the first time in 1760 three months before departure of the expedition by ship) and in a society that was new to him: he was made a captain of the engineers, freed from service with the army to write his account of the expedition, and with this purpose authorized to use the Royal Library. He also received lodging in one of the royal palaces. Niebuhr embarked not only on reporting about the tasks of his commission but also about the tasks of his deceased colleagues since he had tried to collect materials and make observations relevant to their areas of specialization, most notably by copying many inscriptions. Though initially not qualified in many of these disciplines, he ended up contributing with his two published works^r the largest portion of the publications that resulted from the expedition. His publishing of three volumes using the notes of the naturalist Forsskål² made up for the rest of the printed output from the expedition.

Towards the middle of 1768, Niebuhr must have been informed that the new King of Denmark, Christian VII, who came to power in 1766, would visit Paris later in that year. This may have spurred him to give priority to responding to the large questionnaire that the French Académie des inscriptions et belles-lettres had submitted to Michaelis after he had invited scientists from all over Europe to provide questions to the departing expedition. These questions reached the expedition when it was already on the way and in separate instalments, in Constantinople, Cairo and Bombay. Michaelis published the compiled questions, his own focusing on Biblical research, and other documents, in a volume that Niebuhr received in 1763 in Bombay where his last companion died, leaving him the sole survivor.3

Niebuhr was deeply impressed by the scientific depth and breadth of the French academicians' questionnaire (e.g. the detailed *Tables chronologiques des anciens rois de l'Yémen*, a list of Yemen's ancient rulers from 1817 BC to the Prophet Muhammad with remarks and precise questions). From then onwards Niebuhr remained under the influence of these questions, as if the rational and empirical questions of the French academicians had fulfilled his own longing for scientific research freed from Michaelis's Bible-centered approach.

This note is a brief presentation of the document in Latin received in Paris on the 18th of November 1768, which, together with its translation in French and its history, have been made available for the first time in the Academy's own *Journal des Savants* in the July-December 2011 issue.⁴

Niebuhr must have spent the summer of 1768 drafting his responses, not to all questions, but only to the ones from the French Academy. By the first of September he had a draft manuscript translated into Latin ready⁵. The final text, with only a few sentences modified from the last draft, is dated 2nd of September and consists of 20 pages (10 unbound folios) addressed to the "Illustrious and most erudite members of the Academy". The handwriting is in a different hand and much easier to read than the last draft. In the introduction, Niebuhr explains that he will not address all the questions but only intends to provide a preliminary view, while cautioning that only ten months after his return he still has much material and notes to review. At this stage the text does not give any indication that he will separate his principal scientific contribution, his above-mentioned first book, from the more personal one, a detailed narrative of his travel from Copenhagen to Bombay and back to Copenhagen, his second book⁶. Niebuhr's great map of Ara-

4. Detalle and Detalle (2011). Both authors extend their gratitude to the organizers of the symposium "World Views and Local Encounters in Early Scientific Expeditions 1750-1850" held at the Royal Academy in Copenhagen on 27-28 October 2011 on the occasion of the 250th anniversary of the departure of the expedition for this opportunity to place the Menmorandum in its wider context. A word of thank is also due to Professor Bernard Haykel of Princeton University, for his unflagging support. 5. Since the questionnaire was in French, the most common language in Europe at the time, there is no explanation for the use of Latin: we know that Niebuhr used the services of a Mr. Klein for a translation from German, his mother tongue. The original manuscript dated 2nd Sept. 1768, discovered by the present authors at the beginning of the twenty-first century, is in Paris at the "Bibliothèque nationale de France, Division Manuscrits", under "NAF 6896". The draft dated 1st Sept. 1768 is at Kiel University library under "MS KB 314.5." 6. In fact, the financial losses sustained by Niebuhr due to his being the editor-publisher of his and of Forsskål's works led him to abandon the last part of his intended writings, the travel from Aleppo to Copenhagen and his astronomical observations: this was published as vol. III of Reisebeschreibung in 1837 only, long after Niebuhr's death.

^{1.} Niebuhr (1772; 1774-1778).

^{2.} Forsskål (1775a, 1775b, 1776). The authors which to thank Professor Ib Friis for showing them Forsskål's still extant collections of plants at the Herbarium, and Assistant Professor Peter Rask Moeller and Ole Tendal for showing them Forsskål's still extant collections of animals at the Zoological Museum (including the famous "fish herbarium"), both collections at the Natural History Museum of Denmark. 3. Michaelis (1762).

bia (in fact the western part of Yemen only), which he was proud to annex to his Memorandum as he knew it would impress the foremost geographer of the time, Jean-Baptiste Bourguignon d'Anville (1697-1782), a member of the Academy, was not attached to the document. It was Chancellor Bernstorff who, after reviewing it, thought it wiser to set aside the hand drawn map of Arabia out of fear that an unscrupulous Frenchman could publish it without acknowledging Niebuhr's authorship. The fact that this Memorandum vanished as soon as its reception was announced may be interpreted as a proof that no documents were attached, since d'Anville was present on the day it was received, 18th of November 1768, and if he had been given a chance to view a new map he would certainly not have missed the opportunity.

The *Memorandum* attempts to cover as many of the questions of the Academicians as possible and has an impressionistic quality but nonetheless reveals the strength of Niebuhr's methodology, his empathy for the countries and people he saw and the rigorous method he applied in measuring, surveying and writing down all the information he came across. One noteworthy point is that nowhere in the 20 pages does he mention the Bible or the name of his patron Michaelis, a probable indication of his limited interest for the latter's objectives⁷.

The Minutes of sessions of the Academy report that, on 18th of November 1768, "un homme de lettres danois a présenté à l'Académie un Mémoire de M. Nehburg (sic)": the link with a Mr. Schutze, a Dane named foreign correspondent on the 16th of June 1761, whose identity and background are completely unknown, could not be established. The standard procedure for such a communication was to either have an immediate debate following its presentation or to re-

fer it to a panel of "rapporteurs" who would study it further and consider whether it should be published by the Academy. Yet, none of this happened in the case of Niebuhr's Memorandum and this apparent lack of interest for all the new discoveries made by Niebuhr could be linked to the fact that a few days later, on the 3rd of December, the King of Denmark came in person to visit the three Academies 9 and was praised for sending the Arabian expedition.¹⁰ Surprisingly, Niebuhr's name was not mentioned, in spite of him being the only survivor, and his Memorandum having been received two weeks prior: the King had already visited the Académie française and the Académie des sciences and was probably in a hurry. The proximity in date of the reception of the Memorandum and the visit of the King may have been a factor in cutting short the debate on the first occasion, but it does not account for the disappearance of the Memorandum as a source of important information years before the full scientific account would be published.

A hypothesis which we developed in our French article is that the members of the Academy may have suffered from fatigue of the Orient, having been subjected during no less than 26 sessions between 1763 and 1768 to lengthy reports and readings by another oriental traveller, to India in this case, and fellow Academician, Abraham-Hyacinthe Anquetil-Duperron (1731-1805), well known for his translation of *Zarathustra*.

After his books were published and had become classics of Arabian and Persian studies Niebuhr developed close relations, revealed by an active correspondence, with several Academicians in the ensuing years, notably with the famous Orientalist Antoine Isaac Silvestre de Sacy (1758-1838). Niebuhr's perfect copies of the cuneiform inscriptions at Persepolis permitted the decipherment of the three languages ap-

^{7.} This does not prevent Niebuhr from giving a detailed answer to the French questions on religion. See Detalle and Detalle (2008). Among other things, Niebuhr was first to announce and describe the birth of a new "school" called "wahabism", in Niebuhr's own words "sect", one of the origins of today's' salafi movement.

^{8. &}quot;A Danish man of letters presented to the Academy a memorandum by Mr. Nehburg"

^{9.} Always in the formal order: 1) Académie française, 2) Académie des sciences, 3) Académie des inscriptions et belles-lettres. There are now two more academies in the Institut de France: 4) Académie des beaux-arts, 5) Académie des sciences morales et politiques.

^{10.} A decision which in fact had been made by King Frederik V, the father of King Christian VII.

pearing there. As a tribute to his multiple contributions to philology, geography and the knowledge of Arabia, he was elected in 1802 Foreign Associate of the Academy, the most prestigious status for a non-French scientist." Yet, although his many maps were known from his books, his contribution in the fields of astronomy remained little known because the results were published in a piecemeal fashion and with much delay. Had this not been the case, he would have been a more natural candidate for the *Académie des sciences*, given his original training.

A last word should be added about the sad fate of the manuscript, which was not only neglected and forgotten by its recipients in the Academy, but then suffered the added mishap of being stolen by a mathematician and political exile from Italy who had become member of the *Académie des sciences*. After stealing a large number of manuscripts and books from French institutions he sold them to a British collector. Decades later the lot was bought back by the French *Bibliothèque nationale* and forgotten. Sheer luck in 2001 permitted the authors to retrieve the document and its precious content for the benefit of Arabian studies and the historiograpy of Orientalism.¹²

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^{11.} See Detalle (2003).

^{12.} As this article went to press another lost Niebuhriana resurfaced during a family reunion of Niebuhr-descendants in Meldorf, the town where Niebuhr lived and worked from 1778 until his death in 1815. One of them offered to the local *Dithmarscher Museum* the original in German of the King's *Instruction* dated 15th December 1760 for the *mathematicus* Carsten Niebuhr. It is to be hoped that the text will be made available, as it would be the only way to know the exact and final wording of these instructions; none of the copies issued to the four other members of the expedition is known to have been preserved.

The Pedagogical Virtues of Comparison: Jacob Jonas Björnståhl in Constantinople 1776-79

Catharina Raudvere

Abstract

Jacob Jonas Björnståhl is regarded as one of the founders of Oriental studies in Sweden, partly because of his almost three-year stay in Constantinople, from mid 1776 to early 1779, but to an equal extent due to his contacts with the leading European Orientalists of his time during the grand tour that preceded his residency in Ottoman capital. In Resa till Frankrike, Italien, Sweitz, Tyskland, Holland, Ängland, Turkiet och Grekland [Travel to France, Italy, Switzerland, Holland, England, Turkey and Greece] (1780-84) the reader as an armchair traveller can still follow Björnståhl through Europe, from Stockholm to Constantinople, as did the 18th century subscribers to the six volumes that were eventually published on his journey. With his interest in comparative philology and a historical-critical approach to ancient texts he was a forerunner of the evolving more systematic study of the Muslim world in the 18th century. The printed reports for the general public, as well as his manuscripts, bear witness to both his pedagogical and academic ambitions. This short presentation on Björnståhl is relevant to a broader discussion of Niebuhr and the Danish Expedition because Björnståhl's work is notable in two respects. It represents a continuation of general Swedish political interests in the Ottoman Empire as well as new academic trends in Europe that started to influence the universities at Uppsala and Lund from the mid-18th century - in the sciences as well as in the humanities. Born a son of a poor lieutenant Jacob Jonas Björnstål still got a university degree and option to travel on a grand tour as a tutor that eventually took him to the Orient. Thus Jacob Jonas Björnståhl was a man at crossroads significant for this period in both his professional and personal life.

In July 1779 the Swedish Orientalist Jacob Jonas Björnståhl died at the age of 48 in Salonika, Greece. His unexpected death meant that he never received the message that he had been appointed the first professor in Oriental languages at Lund University, or in "Eastern languages and Greek" as the chair was named. Björnståhl had neglected the advice not to drink the local water, fell seriously ill, and died most probably from dysentery. Although he had aspira-

tions to visit Arabic speaking lands, and had just begun his journey at the time, these ambitions remained unfulfilled.^{*}

Björnståhl had completed a long *grand tour* through Europe with two young noblemen (from the early spring of 1767 to March 1776) before he reached Constantinople, the city that had served as a gate to the

^{1.} Zetterstéen (1924).

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Fig. 1. Jacob Jonas Björnståhl. Frontispice in Allgemeine geographische Ephemeriden, Vol. 21. "C. A. B. Sculps." The initials "C.A.B." have not been identified, but the artist has reproducing a print by the Swedish engraver Jacob Gillberg, who based his portrait on a medallion made in 1772 by J. T. Sergel in Rome. This engraving illustrates a biographical note about Björnståhl by the editor of Allgemeine geographische Ephemeriden, F.J. Bertuch, on pp. 109-110 in vol. 21 of the journal. Scanned from the journal.

Orient for several Swedish travellers since the 17th century. After sending the last of the young barons back to Sweden, and having received support from King Gustavus III to visit the Holy Land to search for manuscripts, he continued alone from England and arrived in Constantinople in May of 1776. There he was to prepare himself to travel in the Middle East with a more scholarly focus, especially on philology.

Despite his early death on the threshold to Arabic speaking lands, Björnståhl is, nevertheless, regarded as

one of the founders of Oriental studies in Sweden, partly because of his almost three-year stay in Constantinople, from mid 1776 to early 1779, but also due to his contacts with the leading European Orientalists of his time during the grand tour. In the collection of his travel letters Resa till Frankrike, Italien, Sweitz, Tyskland, Holland, Angland, Turkiet och Grekland [Travel to France, Italy, Switzerland, Holland, England, Turkey and Greece] (1780-84) the reader as an armchair traveller can still follow Björnståhl through Europe as did the 18th century subscribers to the six volumes that were eventually published.2 These printed travel reports were not primarily aimed for an academic audience. Björnståhl's experiences and observations became known to his fellow countrymen posthumously through the editions commissioned by Carl Christoffer Gjörwell (1731-1811), one of the pioneers of the Swedish liberal press. Through various publication projects Gjörwell provided a growing middle class with periodicals on various themes. The editorial process was complicated and Gjörwell's position on the emerging media market must be taken into account when evaluating the relation between the manuscripts and the published volumes.

Björnståhl's fame after his untimely death was of course limited to certain reading circles, still the six volumes have been a popular collector's item and extracts from his travel letters have appeared in many thematic anthologies in modern times. Even if the better part of them deals with Europe at large, the descriptions of Constantinople and the lives of the Turks have been the hallmark of Björnståhl's position in Swedish literary history as a 18th century travel writer. This short presentation on Björnståhl is relevant to a broader discussion of Niebuhr and the Danish Expedition because Björnståhl's work is notable in two respects. It represents a continuation of general Swedish political interests in the Ottoman Empire as well as new academic trends in Europe that started to influ-

^{2.} Björnståhl (1780-1784). The Danish audience was introduced to Björnståhl through Jørgen Stauning's *Iagttagelser og Efterretninger om Orienten* (Stauning 1787) that presented excerpts from Harmar, Niebuhr, Forsskål and Björnståhl, and with a focus their contributions in relation to Biblical studies.

ence the universities at Uppsala and Lund from the mid-18th century – in the sciences as well as in the humanities. Born a son of a poor lieutenant Jacob Jonas Björnstål still got a university degree and option to travel as a tutor on a *grand tour* that eventually took him to the Orient. Thus Björnståhl was a man at important crossroads in both his professional and personal life.

With his interest in comparative philology and a historical-critical approach to the analysis of ancient texts, he was a forerunner in the efforts in Sweden to develop a more systematic knowledge of the Muslim world.³ The travel letters in print for the general public, as well as his remaining manuscripts, bear witness to both his pedagogical and academic ambitions.

The Swedish-Turkish Contacts

The Swedish interest in the Turkish region goes back to the 17th century and could be defined succinctly as contacting enemies of Russia for Sweden sought alliances against its archenemy through many channels, and the Ottoman Empire became part of this web of negotiations and agreements. As early as in the late 16th century contacts were sought with the Crimean Tatars to unite against the Tsar and some partial documentation of these negotiations has survived. From the 17th century there are some very few, but intriguing, Swedish travel accounts from Ottoman lands and Constantinople, most of them with a political and diplomatic background. The Orthodox Lutheran antipathy against "the Turk" and "the Sultan-Anti-

Christ" was accentuated in the religious conflicts of the 16th and 17th centuries and sometimes inscribed in apocalyptic interpretations of the Ottoman military achievements. Although filtered through prejudice and limited knowledge of the context, these early travel accounts emanated from an emerging interest in the world outside Europe and from a view on knowledge as a useful tool in the international political game. In comparison to Björnståhl are two of these earlier texts of special interest. The diplomat Claes Rålamb wrote a diary from Constantinople in 1657-1658 as did the chaplain at the legation, Sven Agrell, in 1709-1712. Both provided accounts of their encounters with Muslim traditions, the splendours and intrigues at the Sultan's court and the large city with a long multi-religious history.4

The Swedish-Ottoman relations were especially intense in the early 18th century, as they changed in character because of dramatic political events. The Swedish King Charles XII fled Russia in1709 after the defeat at Poltava ending his disastrous campaign there, only to become a captive of the Ottoman Sultan. He stayed until 1714 in house captivity at his compound at Bender by the Dniester River (in presentday Moldova, but for centuries a region where the Ottoman and Russian empires met) when he headed north on horseback across Europe. During this period of captivity the king had intense contacts with the Porte, but never visited Constantinople himself or encountered the Sultan in person. Still Charles XII took an active personal interest in the cultural history of the region and was apparently intrigued by Ottoman aesthetics. Three Oriental expeditions were sent out from Bender at royal request and some members returned with quite extensive travelogues. Together with reports from representatives of the Swedish camp sent to Constantinople, these provided blended collections of information about lands of the Bible, manuscripts, ancient vestiges and contemporaneous conditions in the Ottoman state.

^{3.} The framework for the present chapter is the project "Orientalist and Historian. Jacob Jonas Björnståhl's Travel Writing 1767-1779" at Lund University funded by the Swedish Research Council 2011-2014. I am grateful for the opportunity to take part of this project on the traveller at large with some contributions on Björnståhl's time in Constantinople. One ambition of the project is to digitalize Björnståhl manuscripts. Most of them are interesting in their own right as documents from the history of the Swedish press, but the members of the project are convinced of their value for both travel studies in general and Oriental studies in particular. Björnståhl's original notes would be immediately accessible to international readers as he partly wrote in French.

^{4.} Rålamb's travelogue was first printed in 1679 and appeared in a modern edition in 1963. The text was published in English in 1732.

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Diplomats were sent from Sweden to the Porte already in the 17th century and in 1734 a permanent Swedish diplomatic presence in Constantinople was established, after an absence of representation for 20 years. Reports from a line of prolific diplomats, some of them with good command of the Turkish language, constitute a rich source not only on political and diplomatic activities in the 18th century, but for cultural life at large.⁵ The military alliance with the Ottomans lasted from 1709 to 1808. During this time Sweden's political and military power declined, and by the end of the 18th century Constantinople was more and more instead identified as a hub for trade and commerce and the reports to Stockholm from Sweden's diplomats bear witness of these new interests.

Björnståhl entered into this highly intellectual environment at the legation in 1776, and indeed he represents not only a new outlook on academic knowledge, but also a new type of traveller and researcher. Björnståhl did not have the social background of the Swedish diplomats to the Porte (several of them noble men from the beginning or later knighted for their service) or for that matter of the chaplains serving at the legation. The vicars of the legation had initially been on a special mission to buy and free slaves of Protestant background so they would not fall into Catholic hands; the Swedish chaplains at the time of Björnståhl's visit played an important role in the city's Lutheran community delivering their sermons in several languages. Björnståhl may hail the king or praise the Lord in his letters, but he is not a representative of the social elite and he does not appear to reflect a position of personal Christian piety in his descriptions of other beliefs.⁶ He was rather a man

who after his university education got a second opportunity to develop his academic interests in the linguistics of the Middle East, this time through travel. He was a learned man, better educated than the personnel at the embassy, but Björnståhl is, nevertheless, hard to define in social terms as he held no salaried academic position.

Social Mobility, Linnaean Uppsala and the Comparative Method

Björnståhl's biography is interesting in several ways. The emergence of significant social mobility based on education at the time must be underlined.

Although his family was poor (his father was an underpaid second lieutenant in the Swedish army), Björnståhl was able to obtain a first-rate education thanks to scholarships and hard work. Björnståhl's education was made possible due to talent and grants; he was lucky to live in a time when education could pave way for a career.

While growing up he received a solid education at the grammar school in Strängnäs where he could develop interest in Biblical philology and other Semitic languages. Thus he was well prepared when he was enrolled in 1754, slightly over-aged 23 years old, at Uppsala University and started with Biblical studies. He soon pursued a more decided interest in Semitic languages, specifically Arabic. He demonstrated outstanding ability in language studies and displayed considerable ambition. While in Uppsala he also attended the popular lectures of Linnaeus, who exerted a dominant influence on the academic discourse at the university with his systematic ideals, and certainly not only in the sciences.7 The dream of going abroad must have been nurtured by the Linnaeus apostles' journeys far beyond Europe; their findings and trave-

^{5.} Callmer (1985); Karlsson (2003)

^{6.} It is difficult to judge Björnståhl's personal position on religious matters from the manuscripts and the printed texts or to draw any line between personal statements and tropes and literary conventions of the time. There is a difference in the tone between Björnståhl's descriptions of other denominations compared to an earlier document from the Swedish legation, Sven Agrell's diary 1710-1712. Agrell was a chaplain sent from the king's camp at Bender and he read what he witnessed through his own religiosity. A personal

diary and edited travel letters are of course not to be compared straight off, but it is apparent that Björnståhl is more rejecting and even scornful of the Muslim practices he encountered despite his larger formal knowledge of Islam and what could be expected to take place.

^{7.} Lindroth (1981).

logues as well as their many times tragic deaths must have been much talked of topics in Uppsala.

Björnståhl's strong performance as a student caught the attention of Johan Ihre (1707-1780), a scholar in philology well known in Europe for his systematic and comparative approach to the Germanic languages. He became Björnståhl's mentor and tried to steer him towards Germanic studies and a readership in Swedish philology. However, the focus of that position was soon changed to Arabic, which was Björnståhl's area of interest and competence. His thesis at Uppsala was a study of the Ten Commandments from the perspective of Arabic dialects entitled, Decalogus Hebraicus ex Arabica dialecto illustratus (1763). The study was apparently well-received, but as a salaried position at the university was not available, his studies came to an end. Instead, due to the social connections of his mentor, he began work as a tutor at various estates of the Swedish nobility. It was through one of these assignments, with the Rudbeck family at Hässelby, that Björnståhl was presented with the opportunity to travel abroad.

In 1767 Björnståhl set out on a journey that eventually would take him and the two Rudbeck brothers to France. He then continued, with one of them, Carl Fredrik (b. 1755), on to Italy, Switzerland, Germany, Holland and England during which they had opportunities to pay visits to Rousseau, Voltaire, Diderot, Pope Clement XIV and Goethe. Few other Swedes had had an opportunity to meet with so many of the leading European intellectuals of that era. At the age of 21 Carl Fredrik Rudbeck returned home to Sweden to begin a military career in accordance with his family's expectations after the long tour with Björnståhl on the continent. No particular interest in the humanities can be found in Rudbeck's letters after his return to Sweden although the bond between teacher and disciple had been very strong.

Money was scarce and Björnståhl was asked to write travel letters by his benefactor Carl Christoffer Gjörwell who then edited and offered them to subscribers. Any reading of Björnståhl must recognize that the letters were meant for a broader audience, the growing middle class who subscribed to Gjörwell's publications as an introduction to contemporaneous European ideas and his publications served as a "window" to the larger world outside Scandinavia. Thus Gjörwell became an important source of income for Björnståhl and his writings became a significant element in Gjörwell's larger publishing efforts. Gjörwell also worked actively to gain financial support for Björnståhl's extended travels after his position as a tutor ended and was eager to provide more reports from the Orient to his subscribers.

The book version of Björnståhl's travel letters in six volumes (1780-84) was a success with the Swedish audience (although not from an economic point of view) and, even earlier, abroad. A German translation appeared already in 1777, a Dutch in 1778 and an Italian (based on the German) in1782.

The German translation received several reviews, one of them critical as it deemed the text too detailed, yet also criticized the accounts for moving from topic to topic without going into sufficient depth. Björnståhl, apparently upset, wrote a reply that appeared in a later volume. It is written in a self-reflective and personal mode that is very unusual for him. In this passage he characterizes the travelling researcher as a person who is at home everywhere and nowhere:

It could well happen that the traveller, who is focused on exterior matters, sometimes forgets the inner side of things; but those who forever dig inwards should not forget the gratefulness and the dependence they owe the one, who with great effort and endeavour, collects for them abroad.

No one is more modest than the travelling researcher; he openly admits his ignorance; he travels to learn from others – and when he knows one place, he leaves for the next, where he again will be the ignorant – until he has acquired knowledge also here only to leave more enlightened than before.

^{8.} Eight of Björnståhl's letters are, so far, available at the Electronic Enlightenment, a database produced by the Bodleian Library and Oxford University. Letters from Björnståhl's correspondance with Linnaeus are available at http://linnaeus.cr8.net/ with summaries in English; translations of the letters will follow.

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He preaches on his own shortcomings as well as his eagerness to learn.⁹

Even if the persona in the travel letters speaks in the first person and with a distinct voice, usually the curious and enthusiastic learner, are personal passages referring to emotions unusual with Björnståhl. Perhaps it can be assumed that Björnståhl was hurt by the review because he knew it was valid to some degree. On the road year after year, Björnståhl had acquainted himself with the academic debates of the time; he was constantly looking for books and manuscripts, but there was no time for him to sit down and prepare scholarly contributions of his own. Björnståhl's dilemma of being caught between a popular approach and a more academic one is perhaps even more apparent in his writings from Constantinople.

During the *grand tour* Björnståhl's primary responsibility was as a tutor, but he did not miss any opportunity to meet orientalists, philosophers and linguists, or to visit libraries – all intended to advance his insights into the contemporary academic debates in his fields of interest. His eagerness and stamina is well documented. With his background in Semitic studies at Uppsala he was well prepared for his first encounter with the Orient. His previous contacts with Ihre and the systematic and comparative approach to linguistics provided him with a useful method for future observations.

The historical-critical perspectives on the Bible were of special interest to Björnståhl, but not necessarily for theological reasons. These new points of departure put the canonical texts in a broader Semitic landscape where his expertise could be applied. In Paris, where Björnståhl and the Rudbeck barons stayed for almost three years, Björnståhl's position among scholars was witnessed by the visiting Swedish Crown Prince Gustavus (and most likely later influencing the future King's decisions). Another recognition of his growing reputation were memberships in learned societies such as the Académie des inscrip-

tions et belle-lettre in Paris and later the Society of Antiquaries in London.

In Göttingen Björnståhl met with Johann David Michaelis whose broad fields of interest were reflected in the Royal Instructions for the Danish Expedition to Arabia and of inspiration for further contextualizations of the ancient Hebrew texts. Michaelis pioneering approach to Biblical philology that combined the studies of the Old Testament with the general linguistics of the Near and Middle East certainly accorded well with Björnståhl's scholarly preferences. Michaelis was also very well aware of the fact that the lack of relevant manuscripts in European libraries was a hindrance for much research and this must have encouraged Björnståhl who looked for manuscripts wherever he came.

In England, the last stop before Turkey and earlier an important environment to Michaelis' intellectual development, Björnståhl met in Oxford with William Jones, whose Persian translations were actively supported by the Danish king Christian VII. Björnståhl characterized Jones, 28 at the time but already known abroad as an exceptional scholar, as a "genie superieur". The two men had a great deal in common beside their interests in comparative linguistics; they both came from modest backgrounds¹⁰ and had to support themselves as tutors. A university career in their respective main field of interests was not possible for either man. Jones turned to law, became a lawyer and moved to Calcutta. In 1786 he presented his ground-breaking theories on the links between and development of the Indo-European languages as a group, and in line with the methodology Björnståhl had been introduced to by Ihre at Uppsala. Björnståhl apparently felt at home in Oxford with its library collections, colleges and learned men. It was also the place where Benjamin Kennicott was in the midst of the process of publishing his ground-breaking critical edition of the Old Testament which indicated that several of the standard Hebrew texts were the result of editorial later composition.

While in Oxford, Björnståhl received the royal command to go to Turkey. Gustavus III wanted him

^{9.} Björnståhl (1780-1784), Vol. III, pp. 75ff.

^{10.} Although Jones' father was a well-known mathematician.

to embark on an Oriental journey that would collect fresh materials for a recently commissioned new Swedish translation of the Bible.

In Constantinople

Björnståhl was well received upon arrival at the Swedish legation in Constantinople. The envoy at the time, Ulric Celsing (1731-1805)11, had learnt Turkish and there were two local language teachers stationed at the legation along with two dragomans. Celsing was impressed by Björnståhl and helped him to obtain further funding for his assignment and expressed astonishment that Björnståhl could not find a permanent position at a Swedish university. Björnståhl was welcome to stay at the Palais Suédois, but for some periods he also chose to live in the city to learn Turkish more quickly. He apologizes to Gjörwell who apparently "expects that I already speak Turkish, since I so long before my arrival to the Orient - specially during my long journey through the noblest of European countries - endeavoured in Oriental languages. But it does not come quickly."12 In contrast to the other countries he had stayed in, he did not know the local language before hand. This disadvantage triggered his desire to become proficient in Turkish. In his efforts Björnståhl was frustrated that he could not find proper dictionaries and grammars on Turkish, as he was used to having had in the libraries of Europe. He was therefore quite happy when he found an accessible public library recently opened with the support of funds left by the late grand vizier, Raghib Pasha (1698-1763). Björnståhl described this library in an almost exuberant tone: "It is open every day, except on the Turks' holidays. It has MSS of Turkish, Arabic and Persian books in various Sciences, after their subject matters". It was open to Europeans, as Björnståhl puts it in his letter, but he expressed surprise when it came to the interior design: "There are no tables or chairs in the whole library, one has to sit on the floor according to the customs of the country, on carpets, tapestry, or on pillows or pads, -- holding the paper in the hand and writing on the knee." Despite the grumpy tone about the practicalities Björnståhl was happy to go through the collections; he praised the vizier who had made it possible through his will and noted that the donor's mausoleum was located just outside the library. In Björnståhl's depicition the library stands out almost as a shrine for learning.

Taking on Oriental dress had been the strategy of many travellers to try to blend in and search for authenticity. Foreign traders and diplomats had portraits of themselves in Turkish clothes made back home as a sign of acquaintance with the East and as memorabilia (Linnaeus had himself painted in Sami costume). By taking on Turkish costume and hereby performing a kind of cultural cross-dressing, Björnståhl hoped to explore parts of the city outside the diplomatic quarters of Pera. Probably he was more successful than most travellers as he really tried to engage with people, although sometimes these efforts were disappointing because he found the residents not forthcoming enough. Björnståhl's intentions to learn Turkish were serious and he repeatedly emphasized that command of the local language is as the key to successful observations in a foreign land. He commented on the difficulties he had with Turkish, of a language family previously unknown to him, totally different from the Semitic Arabic and the Indo-European Persian and still with so many influences and loanwords from them: "this is why this is the richest and most difficult language."14 An additional difficulty in gaining information was the challenge of socializing with the Turkish people and the absence of any invitations into private homes as he had been used to in his earlier travels in Europe.

Björnståhl was not only deeply disturbed by the difficulties of this process of education in the Middle

II. Both his father and elder brother had served at the Swedish representation to the Port. All three Celsings took an extraordinary interest in Turkey and Ottoman life and their diplomatic reports serve as a most useful complement to Björnståhl's notes and letters. Karlsson (2003).

12. Björnståhl (1780-1784), Vol. III, p. 3.

^{13.} Björnståhl (1780-1784), Vol. III, p. 37.

^{14.} Björnståhl (1780-1784), Vol. III, p. 2.

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East, but he also missed his old travelling companion. His letters to Sweden tell of a rather miserable person, who, after so many years with company, now finds himself alone. It is apparent from his writings that he saw Constantinople as only the starting point for a much more extensive tour of the region and it is apparent that Björnståhl finds the stay too extended; he urged to move on.

Björnståhl is often negative, if not harsh, in his descriptions of the Turks he encountered. Several reasons could be behind these condescending remarks. Björnståhl's interests had to this point been primarily philological and antiquarian and perhaps he was disappointed by his encounter with the Orient. His experience did obviously not live up to the expectations he had from reading. It is apparent from the letters that Björnståhl had read earlier travel accounts in various languages, most likely during his visits to libraries during the *grand tour*; the question remains what expectations they had given him.

If books, manuscripts, sites and celebrities had been the focus in his travel accounts before, in Constantinople Björnståhl tried to portray customs, people and culture in a way he had not done before. The philologist obviously felt uncomfortable as ethnographer. He was disappointed that he could not find Turks interested in what he regarded as learned matters and therefore he deemed the Turks he encountered as lacking in curiosity and drive in science. Many were reluctant to respond to his intense inquiries on various matters and even suspected him of being a spy. Turkish men of learning did not speak any European language and spoken Arabic was apparently not an option for communication. Fortunately, the dragomans at the legation came to play a crucial role for Björnståhl in supporting his attempts to understand the environment he was investigating - one that he assumed to be an indication of the real Orient, i.e. the Arabic speaking world.

The basic categories in Björnståhl's narrative strategy are contrasts and dichotomies, and the fundamental differences between Europeans and Turks is the continuous theme in his writings from Constantinople.

This mode of narration colours the way he communicates with an audience with limited knowledge of the Ottomans, and even less of the historical background. The implicit reader of the travel letters appears to be eager to learn as the account is full of detail, but not broad milieu descriptions. Björnståhl choose a didactic method for his presentations in Gjörwell's publication, which in many respects represented a legacy from Linneaus' and Ihre's Uppsala, where systematic structuring of acquired knowledge was combined with an abundance of detail. Hereby he combined the academic and the popular; and the encyclopaedic flow of earlier descriptions of foreign lands merges with the more systematic orientation of the Enlightenment and emerging evolutionism.

Björnståhl's work consists of linguistic observations and ethnography as well as reports on contemporary life in Constantinople and the ceremonies and hierarchies at the sultan's court. The texts actually do not provide any unique information when it comes to ethnographic data; Björnståhl adds to the picture formerly drawn by diplomats on political missions, adventurers, tradesmen and chaplains at the Swedish legation as well as other European travel writers. Though, he complains: "we still have more novels in Europe than trustworthy descriptions of the Turks". ¹⁵ Although Björnståhl is very much present in his texts as a persona - the voice who speaks directly to Gjörwell and who interrelates the letters by commenting on previous episodes - Björnståhl's letters are not personal documents. The conventions of genre and expression he followed leave space only occasionally for the contacts he actually must have had with the Turks. Björnståhl is in this sense a restrained writer.

After a year in Turkey, Björnståhl wrote an often quoted letter to Gjörwell in which he summarized his observations in a catalogue structured around oppositions. ¹⁶ The catalogue may be rejected as more prejudice than actual ethnographic observations, but it should be underlined that Björnståhl here followed frequent themes well established in travellers' narra-

^{15.} Björnståhl (1780-1784), Vol. III, p. 43.

^{16.} Björnståhl (1780-1784), Vol. III, pp. 59ff.

tives from the Orient over more than a century. He starts out with emphasizing the problems of communication and provides an explanation to why this is so: "We find their manners strange, and they ours. Their living and their customs still reveal their ancient origin in the lands of the East." When he continues, Björnståhl prepares the reader for the odd things that will be described: "one can never make a better overview of Turkey than imagining a Europe reversée." Björnståhl compares himself with a landscape painter and starts a long comparative catalogue on a favourite theme in Oriental travel writing, clothes, headgear and hairstyles. It begins: "We use short and cut cloths, they use long and full-length. Our clothes are tight and sit neat, theirs are wide and clumsy. Our headgear is black, their is white or green." In the following Björnståhl provides details on material and style, Turkish terminology and some references to religious regulations for clothing. The prohibition for men to wear silk and gold decorations is mentioned and as is the conception of Prophet's modesty in dressing. "When men take the liberty [to wear such things] are they not regarded as righteous Musulmans, but as Freethinkers that do not care about God's or man's Laws." In all respects are the differences between us and them kept up. As in the rest of Björnståhl's text, the term Turk refers to Muslims a group and there is no doubt what "their religion" is.

When Björnståhl uses the term Turks he means Ottoman Muslims as a collective (commenting explicitly that Arab traditions in certain respects are different). Other religious groups, Christians and Jews, are more often defined in detail and the reader becomes familiar with the differentiation in-between Christian denominations. Björnståhl here represents an early Swedish scholarly interest in non-Christian religions; which at the time had no distinct academic discipline. He typically began his own studies with the Biblical languages, and by way of his interest in Arabic and the opportunity to travel, he became a fieldworker with a forum to report back. On the one hand he regards the religion and culture of the Muslims as a reminiscent of ancient cultures and therefore per se of interest; on the other he notices a society with

a potential to develop. From his Enlightenment perspective is it no wonder that Björnståhl identified as key problem of what he saw as the lack of interest in science, and a rejection of European influences: "Their prejudices, and, yes, their inborn contempt for Europeans in particular." This attitude is explained in Björnståhl's writings as a combination of pride and foolishness among the Turks. There are no instances in his formulations about the Turks that link to a more romantic view as more authentic and natural. Björnståhl's method of making sense of the differences he presents is through direct comparisons, or overt cultural translations. Thus the imam becomes the vicar of the Turks, the mosque the church of the Turks and the Sultan the Emperor.

The often-quoted catalogue could be contrasted with Björnståhl's long and lively description of the Ramadan celebrations in the autumn of 1778. The text is rich in details and more or less without normative judgements, and is perhaps the most detailed example of Björnståhl as a fieldworker. Here he sums up his observations from the holy month and criticizes scholarly literature on the matter with reference to his own observations.

Björnståhl refers back to a previous letter where is has commented on how lamps light up the mosque areas during Ramadan, something that apparently intrigues him. But this is an unusually sensual statement for Björnståhl. The festivities every evening after the breaking of the fast must have affected the whole city. Yet are people to a great extent absent from this description. Björnståhl is focused on terms and etymologies, and he provides translations of the concepts sometimes by means of oppositions or negations, sometimes with comparisons. The letter deals with dogma and regulations: what is permitted and not during the fast; and he gives a lengthy description of how the time for Ramadan is calculated. With his interest in Arabic, a modern reader wonders what Björnståhl thought of the long Quran recitations so common during Ramadan and when he describes the rules for the fast, what about the popular celebrations after dusk? Still he constructs an

^{17.} Björnståhl (1780-1784), Vol. III, p. 59.

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ethnographic present in the text by regularly stating "I have seen", "I have heard". And the details of the Sultan's distribution of sweets give a hint of Björnståhl's more sensual observation. If sounds, smells and human agency are absent most of the time is it also a reminder that the personal, romantic even emotional travel writer is the voice of another century.

The conventions of travel writing are of course a crucial perspective on Björnståhl, but his academic background should not be neglected or the implications of the comparative method taken beyond scholarly texts. He represents in this respect a shift between a period when academic knowledge was separated from other types of knowing in terms of educational institutions, genres, mode of communication and professional representatives and positions. A development that made the disciplines of the humanities expand as distinct fields of study, but caused problems for theology when confronted with the consequences of historical critical readings of the Bible.

Contextualization, comparison, and textual criticism opened up for process related perspectives on cultural change, and not the least on religion. The development of religions in the Near and Middle East was seen from these perspectives as interconnected over long periods and between geographical areas thus contradicting the view of a specific religion as essentially unique and stable in form over time. The comparative method also opened the way for theoretical perspectives on cultural phenomena as uniquely embedded in distinct contexts as well as representing shared categories in human culture that could be compared. These two sides of 18th century comparisons are visible in Björnståhl's dichotomies between a pronounced "us" and Turks. The phenomenological comparison was therefore well supported by the emerging evolutionary paradigm in the study of foreign cultures that would dominate the academic discussions on culture and religion in the 19th century and well into the 20th.

It is difficult to compare Björnståhl's work with that of the Royal Danish Expedition to Arabia. The latter encompassed many competences reflective of the systematic scientific ideals of an age focussed on science, with its members trained in the natural sciences, Semitic languages, geography, cartography and astronomy. Björnståhl is thematically narrower and hardly observes nature. The observations of Niebuhr, Forsskål and von Haven are hard to compare with Björnståhl's because the character of their findings is different. Björnståhl was providing his publisher in Stockholm with letters to a general audience to earn some money for his travel, still waiting to make the ultimate voyage to Arabic speaking areas and to search for the cultural roots of Judaism and Christianity.

Finally, after a long stay in Constantinople a royal commission dated 27 November 1778 asked Björnståhl to continue on a tour "to search, note, and - if possible - buy new and important variants of Hebrew and Greek manuscripts of the Bible, and the oldest codices of the Biblical text, also other ancient writers, preferably Biblical." Equipped with the Sultan's ferman and recommendations from the Swedish representation, Björnståhl started his fatal journey with a visit to Greece in January 1779 with the intent to visit monasteries there with their rich collections of manuscripts. The journey to Greece was successful, and few European scholars knew what treasures were kept within the walls of the monasteries. Already here Björnståhl fulfilled part of his mission. After Greece he was to join with the younger scholar Matthias Norberg (1747-1826) to continue to Palestine and fulfill the royal commission. But Björnståhl's death came inbetween. Norberg, who had been delayed in his travel from Sweden, later actually was offered the chair at Lund University that Björnståhl never knew he had been appointed to. The two never met; Björnståhl died before Norberg arrived at Constantinople and Norberg never completed the journey as planned, but went back to tack up his professorship.

A Philologist Turned a Reluctant Fieldworker?

Jacob Jonas Björnståhl was in many respects a child of his time. His personal life bears witness to the emerging social mobility in Sweden that made new careers possible to sons of the less fortunate through the vehicle of advanced education. Still Björnståhl faced many obstacles because of his poor background and his accomplishments would have been impossible without his extraordinary energy and eagerness to learn. His early interest in the Orient and studies on his own as a very young man prepared him well for the university, but he was in no way a typical student of his time.

A few generations earlier, a man with Björnståhl's social background would have had few other intellectual career options than that of the clergy. At Uppsala Björnståhl found himself in an environment with lively international contacts and news of the travels of the Linnaean disciples. His teacher and mentor Johan Ihre showed him a way to implement new scientific methods on philology and to find his own path in Semitic studies. The Björnståhl corpus as we know today is not primarily the philological dissertations of the young man at Uppsala, no matter that they caught attention then. What readers peruse today in the six volumes of Resatill Frankrike, Italien, Sweitz, Tyskland, Holland, Ängland, Turkiet och Grekland is a synthesis of scholarly intentions, genre conventions of the travel letter and a wish to enlighten the reading audience with impressions from abroad.

Yet, the way Björnståhl made sense of the cultural diversity he encountered in Constantinople is deeply influenced by the new methods of approaching language and cultural history through systematization. Rather than reading him only as an example of the prejudiced gaze of "the other", Björnståhl's texts are examples from a time when book learning to an increasingly extent met direct observations, and when academic studies had not yet found its structure to organize systematic fieldwork. For the general intellectual history of the Enlightenment, for academic history and for press history he deserves a place among the early Orientalists. Björnståhl and the lettered envoy Ulric Celsing both stemmed from a period when learning was less institutionalized and both could contribute in their own way based on first hand experience.

Subsequently the Swedish interest in the Orient

followed new paths. This could partly be explained by the decline of the Ottoman Empire and that Sweden's relations with Russia became more settled after the loss of Finland to Russia in 1809. Matthias Norberg, who learnt about Björnståhl's death when arriving to Constantinople in 1779 and stayed there for a period before returning to Sweden in April 1780, promoted the role of Turkish among the Oriental languages during his time as professor. This is a field that otherwise has been over-shadowed in Swedish academia by Arabic in the Semitic language group and Persian with its Indo-European context. The theological interest continued to be focused on historic Palestine and Near Eastern archaeology, where findings of ancient texts and shed artefacts new light on the Bible. The centre for that interest was clearly Jerusalem than Constantinople. Nevertheless, in the 19th century the knowledge of the Arab world and the Far East increased, and to many travellers Constantinople became just a point of entry to the Middle East, even more so than before.

It may be recalled, Björnståhl wrote about the modest and ignorant travelling researcher in response to his critical reviewer; he was neither. Talented and learned, he knew how to take advantage of the situation and he became a very experienced traveller. The letter quoted above, though, indicates his awareness that he had not yet fulfilled his academic ambitions and perhaps a suspicion that he never would.

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Travelling Among Fellow Christians (1768-1833): James Bruce, Henry Salt and Eduard Rüppell in Abyssinia

Ib Friis1

Abstract

In Yemen the Arabian Journey visited a Muslim country which was little known in Europe. Also the Christian highlands of Abyssinia, separated from Yemen by the Red Sea, were poorly known outside and were visited by few scientific travellers between 1750 and 1850. Most important were James Bruce (in 1768-1772), Henry Salt (in 1805 and 1809-1810) and Eduard Rüppell (in 1832-1833). All three interacted with all strata of Abyssinian society: rulers, nobility, clergy, traders and local peasants. They all followed similar routes in northern Abyssinia, collected general information and objects of natural history and studied Aksumite monuments. Bruce and Rüppell were also important collectors of old Abyssinian manuscripts. All three wrote travelogues for the general reader and commented on work of their predecessors. Yet their approach and attitudes to the country and its people were notably different: Bruce was an eccentric and wealthy Scottish laird with attitudes characteristic of his class. Salt, an English artist and secretary to a British peer of the realm, had more liberal attitudes. Rüppell, a German naturalist sent by the Senckenberg Naturforschende Gesellschaft, a learned association in Frankfurt, approached the Abyssinians with scholarly attitudes of his time. Bruce, Salt and Rüppell expressed views about the past and present of the Christian Abyssinian civilisation; Salt also nourished a political vision for future interaction between Abyssinia and Britain.

This is a comparison of three expeditions to Abyssinia during the period 1768-1833 – the travels of James Bruce, Henry Salt and Eduard Rüppell. Being a botanist, the author's interest in the three travellers began with their activity as botanical collectors. However, the author's field work in many parts of Ethiopia and Eritrea, as well as his contribution to a book on the plant drawings of Bruce and Luigi Balugani enhanced his awareness of Abyssinian history and material and

spiritual culture.² In this review it is attempted to outline the observations by Bruce, Salt and Rüppell, including their views on the fellow Christians they travelled among.³ The geographical area covered in this

I. The author wants to thank Lawrence J. Baack for reading and commenting on earlier drafts of this manuscript. However, the responsibility for the text and conclusions rests entirely with the author.

^{2.} The author has taken part in two flora projects relating to the Horn of Africa: the *Flora of Ethiopia and Eritrea* and the *Flora of Somalia* (Hedberg 2009; Friis 2009a, 2009b; Thulin 1993-2006). His other works on the region include a monograph of the forests of the Horn of Africa (Friis 1992), a vegetation atlas of Ethiopia (Friis, Sebsebe Demissew & van Breugel 2010) and an account of Bruce and Balugani's plant drawings (Hulton, Hepper & Friis 1991).

^{3.} In the main text the most common spelling of personal and place-names are used; where such names are dealt with in

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paper is now part of modern Ethiopia and Eritrea, but here the name Abyssinia has been used for the predominantly Christian highlands,⁴ as it was used by the three travellers.

The Christian background of eighteenth and nineteenth century Abyssinia

A pagan Aksumite civilisation flourished in Abyssinia in the first centuries AD, when unvocalized and vocalised adaptations of the Epigraphic South Arabian script were created to fit the local Semitic language, Geez or classical Ethiopic. The Aksumite kings built palace-like buildings, erected monolithic, up to 30 meter tall stelae, some with architectural ornamentation, and minted coins of bronze or gold with Greek and Geez inscriptions.5 Around 350 AD the introduction of Christianity as the official religion of Abyssinia was marked on coins minted by King Ezana. ⁶ Jerusalem soon became a place of particular importance for Christian Abyssinia. An ancient Abyssinian monastery in Jerusalem, Dayr-as-Sultan, exists even today on the roof of the Chapel of St. Helen at the Church of the Holy Sepulchre.7 In the fifteenth century Abyssinian clergy came to Rome, and the Pope granted

Encyclopaedia Aethiopica they are also given in standardised transcription in the footnotes, allowing easy reference to the Encyclopaedia. The published volumes of the Encyclopaedia Aethiopica are listed in the References under Uhlig (2003, 2005, 2007) and Uhlig & Bausi (2010).

- 4. Abyssinia was the name used for parts of the present countries of Ethiopia and Eritrea up to the middle of the 20th century, referring to the predominantly Christian and Semitic speaking highlands. "Abyssinia" in Uhlig (2003).
- 5. Phillipson (1998); "Aksum" and "Aksumite culture" in Uhlig (2003); "Epigraphic South Arabian" in Uhlig (2005); "Inscriptions" in Uhlig (2007); "Gə°əz" in Uhlig (2005); "Stelae" in Uhlig & Bausi (2010); "Coinage" in Uhlig (2003).
 6. King Ezana (c. 325-c. 370; ruled c. 330-c. 370) is mentioned in 356/357 by the Roman Emperor Constantin II in connection
- in 356/357 by the Roman Emperor Constantin II in connection with the introduction of Christianity in Abyssinia. Ezana's early coins are marked with pagan symbols, his later coins with a Christian cross. Pankhurst (1998); Phillipson (1998); "Ezana" in Uhlig (2005).
- 7. "Dayr as-Sulţān" in Uhlig (2005); "Jerusalem" in Uhlig (2007).

them the use of a church, Santo Stephano dei Mori, in the Vatican gardens, and later a hostel adjacent to the church.8 Before the Portuguese circumnavigation of Africa in 1498 the Abyssinians had attempted to contact authorities in Venice, Florence, France, Spain and Portugal.⁹ In response to such contacts a Portuguese delegation travelled widely in Abyssinia in 1520-1526 and wrote a detailed report of the travels, partly published in 1540.10 A reason for these contacts was the attacks on the Christian highlands in Abyssinia by Muslim armies under Ahmad iben Ibrahim." A Portuguese army landed on the Red Sea coast in 1541 in order to support Christian Abyssinia, and eventually the Muslim invasion was halted.12 With the army came Jesuit missionaries, proselytizing, studying Abyssinia's history and geography, and influencing the Abyssinian building style.¹³

- 8. The first community of Christian Abyssinians in Rome seems to have been established in 1481. The church of *San Stephano* had become "*dei Mori*", "*degli Abissini*" or "*degli Indiani*" by 1495. In 1531 an Abyssinian monk named Tomas helped Johannes Potken, a German provost from Cologne, to publish the first printed Psalter in Geez. "Potken, Johannes" and "Santo Stephano dei Mori" in Uhlig & Bausi (2010).
- 9. "Links with European Christendom" in Pankhurst (1998). 10. Beckingham & Huntingford (1961); "Alvares, Francisco" in Uhlig (2003).
- II. The invading Muslim armies came first from Adal, a region in the lowlands between Harar and the Ogaden, later from the Muslim city state of Harar. Ahmad b. Ibrahim (c. 1506 1543), also known as Amad b. Ibrāhīm al-Gāzī or Ahmad Gragn ["the left-handed"], was born in Adal and became leader of Harar. Refusing to pay taxes to the Abyssinian Emperor, he started a holy war against the Christian highlands; he fell in the war in 1543. "Imam Ahmad iben Ibrahim and his Expedition" in Pankhurst (1998); "Ahmad b. Ibrāhīm al-Gāzī" and "Aksum Séyon" in Uhlig (2003).
- 12. "The Arrival of Christovão da Gama" in Pankhurst (1998); "Gama, Christovão da" in Uhlig (2005).
- 13. The Jesuit Manoel de Almeida (c. 1579-1646) spent ten years in Abyssinia and wrote *História de Etiópia a alta, ou Abassia*, partly translated by Beckingham & Huntingford (1954); see Pankhurst (1965), pp. 36-47; "Almeida, Manoel de" in Uhlig (2003). Jerónimo Lobo (1595-1678), another Jesuit, spent the years 1623-1633 in Abyssinia and wrote two manuscripts about the geography and history of the country; see Lobo (1735); Pankhurst (1965), pp. 47-50; Da Costa, Lockhart &

In 1557 the Jesuits began a series of attempts to convert the Abyssinian rulers from the traditional Abyssinian Orthodox faith to Catholicism, but only about hundred years later the Jesuits were successful in converting Emperor Susenyos to Catholicism, after which widespread rebellion and civil wars broke out. Hemperor Susenyos' son, Fasiledes, expelled the Jesuits in 1632, and broke all formal contacts with Europe, but in Europe, particularly in Rome, contacts between Abyssinians, visiting or living temporarily in Rome, and Europeans continued, for example between the Abyssinian monk Abba Gregoreyos and the German scholar Hiob Ludolf. Only very few Europeans continued, For the Europeans continued in the German scholar Hiob Ludolf. Only very few Europeans continued.

Beckingham (1983); "Lobo, Jerónimo" in Uhlig (2007). A comprehensive history of Abyssinia by a third Jesuit, Pedro Páez (1564-1622), was edited and translated by Boavida et al. (2011). A certain Portuguese influence is seen in the Gondarine architectural style of Abyssinia, in which e.g. the palaces of Fasiledes [Fasilädäs] and Iyasu I in the Imperial Compound of Gondar were built; see "Architecture" in Uhlig (2003). 14. The Spanish Jesuit Andrés de Oviedo (1518-1577) began unsuccessful attempts to convert the Abyssinian Emperor to Catholicism; see "Oviedo, Andrés de" in Uhlig & Bausi (2010). Emperor Susenyos (c. 1571 - 1632), who ruled 1607-1632, ordered in 1625 the conversion of all Abyssinian provincial governors to Catholicism. But in 1632, due to unrest, he had to abdicate in favour of his son Fasiledes [Fasilädäs], who was an Orthodox Christian; see "Sysneyos, Danqaz and Catholicism" in Pankhurst (1998); "Susényos" in Uhlig & Bausi (2010).

15. Fasiledes (1603-1667), ruled 1632-1667; see "Fasilädäs" in Uhlig (2005). Hiob Ludolf's Abyssinian informant, Abba Gregoreyos (died 1658), came from a monastery, Mekane Selase, near the town of Desie. He converted to Catholicism under Susenyos and left Abyssinia in 1632 to settle in the Abyssinian community in the Vatican. In 1649 he met Ludolf in Rome and became his teacher of Geez and main informant about Abyssinian languages, history, culture and Orthodox Christianity. In 1652 Gregoreyos went to Germany, invited to Gotha by Duke Ernest von Sachsen-Gotha-Altenburg to work with Ludolf. Gregoreyos wanted to return to Abyssinia in 1658, but died on the way; see Pankhurst (1965), pp. 56-66; "Gorgoryos" in Uhlig (2005). Hiob Ludolf (1624-1704) is the founder of Ethiopian studies as an academic discipline. He introduced the idea of previously formulated questions to representatives of foreign cultures; see Ludolf (1681); "Ludolf, Hiob" in Uhlig (2007).

pean visitors came to Abyssinia between the expulsion of the Jesuits in 1632 and the arrival of Bruce in 1769, for example the French apothecary Charles-Jacques Poncet, who was invited to the imperial court at Gondar in 1699 in order to treat Emperor Iyasu I. Eighteen years before the arrival of James Bruce in Abyssinia, the Bohemian Franciscan Father Remidius Prutky, who had received medical training, was invited to Abyssinia by Emperor Iyasu II in 1752-1753. 17

James Bruce and Luigi Balugani

James Bruce¹⁸ (1730-1794) was a Scottish aristocrat and the most important foreign traveller in Abyssinia since the expulsion of the Jesuits. He was the son of David Bruce, who inherited the name of Bruce and the estate of Kinnaird in Stirlingshire, Scotland, from

16. Poncet (1655-1706) was invited to the Imperial court at Gondar to treat the Emperor Iyasu I for a skin disease. He arrived at Gondar in July 1698 and was forced to see the Emperor in secret to avoid rumours about renewed Catholic influence in Abyssinia; see Pankhurst (1965), pp. 67-71; "Poncet, Charles-Jaques" in Uhlig & Bausi (2010). Emperor Iyasu I (c. 1658-1706) ruled 1682-1706; see "Iyasu I" in Uhlig (2007). There is no evidence that the French count, Pierre Josef le Roux d'Esneval, who persuaded the Danish King Christian VI to send an expedition lead by him and F.L. Norden up the Nile towards Abyssinia in 1737-1738, had any contact with Iyasu II, then still a very young Abyssinian Emperor, nor with the regent, Mantuab, widow of the former Emperor Bakaffa. There is no mentioning of attempted contacts between Denmark and Abyssinia before the Arabian Journey in the article "Denmark, relations with", nor is any attempt at French-Abyssinian contacts in the 18th century mentioned after Poncet's visit in the article "France, relations with"; both articles in Uhlig (2005).

17. The manuscript of Prutky's travels was rediscovered in the 1960'es and published and translated by Arrowsmith-Brown & Pankhurst (1991). Prutky came to Massawa in February 1752, arrived at Gondar in March, and visited the source of the Blue Nile. In April 1753 he left Abyssinia via Massawa.

18. No new scholarly biography of Bruce exists. Alexander Murray, editor of the second and third editions of Bruce's *Travels* (Bruce 1805, 1813), wrote a biography. Biographies for the general reader have been published by Reid (1968) and Bredin (2000). Short biographical notes by Paul Hulton appear in Hulton, Hepper & Friis (1991).

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his mother. The family had Hanoverian sympathies, and James was sent to school at Harrow in England, where he read the classics and acquired an interest in art and architecture. In 1754 he married Adriana Allen, the daughter of a wealthy wine merchant. In October 1754, when the newlywed couple was on their way to Provence, Adriana tragically died in Paris. Bruce was outraged by Catholic priests who tried to convert her on her deathbed and refused her burial in consecrated ground. From these traumatic experiences Bruce developed a deep and lifelong antipathy for Catholic clergy, a mind-set that later influenced his attitude to Jesuits and their scholarly work on Abyssinia.

In 1757 Bruce embarked on a long tour of the European Continent, which took him to Portugal, Spain and the Low Countries. At the death of his father he inherited the title Laird of Kinnaird and quickly returned to Scotland to take possession of the Kinnaird estate, where rich deposits of coal had been found. In 1760 he made contract about extraction of coal with the Carron Company, located only a few miles from Kinnaird and then the largest iron factory in Europe. This contract meant a considerable income for Bruce, and allowed him to travel again without concern for the costs. He was offered the post of British consulgeneral in Algiers, where, apart from his main duties, he would be able to study and draw ruins of Roman architecture. But the post was not immediately vacant, so while waiting for the vacancy Bruce travelled in France and Italy, studying Oriental languages (including Arabic and Geez), classical art and drawing. In Florence he found artists capable of redrawing and embellishing his original architectural drawings from Paestum, but he did not manage to publish them. Finally, in February 1763, he was requested to take up his post in Algiers.

The post as consul-general was more difficult than anticipated, and Bruce resigned from it in April 1765. While in Algiers he hired an artist and draftsman from Bologna, Luigi Balugani, to assist with the drawing of Roman ruins in North Africa. In August 1765 the two men set off on a long journey through Tunis, Libya, Crete, Rhodes, Lebanon and Syria to Egypt. In Al-

giers, Bruce had been able to study medicine with a British surgeon, Richard Ball, and in Aleppo, Bruce was again taught surgery and medicine by the Scottish surgeon and naturalist Patrick Russell. It was probably in Egypt that Bruce formed the idea of going to Abyssinia. In December 1768 the party sailed up the Nile to the first cataract at Aswan (Syene) and joined a caravan crossing the desert from Quena to the small town of Qusayr on the Red Sea coast, which they reached in February, 1769. They left Qusayr in April, 1769, and sailed via ports of the Red Sea to Luhayyah in Yemen, from where they sailed to Massawa on the Red Sea coast of Abyssinian in September, 1769. 19

While waiting for negotiations with the Naib of Massawa about permission to proceed inland, Bruce and Balugani made observations on the bay of Massawa and the Dahlac Islands. ²⁰ In November, 1769, they were permitted to travel through the coastal plains with a caravan of men and mules and to ascend to the Christian highlands. The route of Bruce and his party through Abyssinia is plotted on a modern topographical map in Fig. 1. Having passed the first town in the highlands, Dixan, ²¹ they continued through the province of Tigray²² and finally reached the historical town of Aksum in January, 1770. ²³

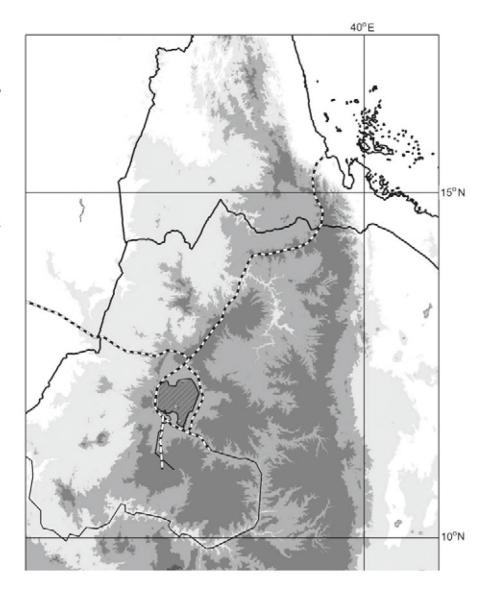
^{19.} Hulton, Hepper and Friis (1991), "Bruce, James" in Uhlig (2003). Massawa, at 15° 36½' N, 39° 28' E, is the largest deep sea port on the African side of the Red Sea. It replaced the Aksumite port of Adulis at some time between the 8th and the 10th century and has since been one of the main ports serving the Abyssinian highlands. "Massawa" in Uhlig (2007). See the article by Friis in this volume "Carsten Niebuhr and James Bruce: Lifted Latitudes and Virtual Voyages on the Red Sea ...?" about the truth in Bruce's claim of having made a voyage south of Qusayr and Luhayya.

^{20.} The Naib was the local official representative of the Ottoman Turkish Empire, governing the Abyssinian Red Sea coast. "Nā'ib" in Uhlig (2007).

^{21.} Small town at 14° 59' N, 39° 14' E. "Dəgsa" in Uhlig (2005). 22. Tigray is a historical region and now a regional state for the Tigrinya-speaking population in northern Ethiopia. "Təgray" in Uhlig & Bausi (2010).

^{23.} Town at 14° 07' N, 38° 44' E. It was the capital of the Aksumite Empire to c. 9^{th} century and remained the town

Fig. 1. Travel route of James Bruce in Abyssinia (entire route from the Red Sea around Lake Tana to the source of the Blue Nile and to the Sudan). Luigi Balugani died at Gondar, after the journey to the source of the Blue Nile. The altitudinal shading is: No shading: < 500 m. Pale grey: 500-1000 m. Medium grey: 1000-2000 m. Dark grey: > 2000 m. Modern borders are marked with the thickest lines; rivers with thinner lines.



In the *Travels*, Bruce briefly described the old stelae at Aksum ("... one larger than the rest still standing, but two larger than this fallen") and other ruins.²⁴ He suggested that these ancient monuments were created by "Cushitic" people, for "the Abyssinians never built any city, nor do the ruins of any exist at this day in the whole country." Bruce (probably, rather than the more accurate draftsman Balugani) also drew the ar-

chitecturally decorated, still standing stela, which Bruce thought was "the work of Ptolemy Evergetes." The ornaments on the large stelae were, according to Bruce, "... something like metopes, triglyphs, and guttae, disposed rudely, and without order ..." He also believed that large stone slabs were pedestals for Egyptian statues: "... solid pedestals, upon the top of

where the Emperor was crowned. "Aksum" in Uhlig (2003). 24. Fig. 2, showing the only architecturally decorated stela at Aksum which was standing at the time of Bruce's visit.

^{25. &}quot;Euergetes" is the name of two Ptolemaic kings of Egypt in the third and second century BC: Ptolemy III Euergetes (246 BC-221 BC) and Ptolemy VIII Euergetes II (170-163 BC and 145-116 BC).

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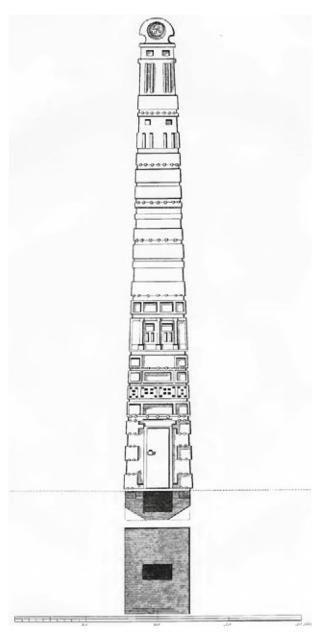


Fig. 2. James Bruce (or Luigi Balugani): Detail of *Obelisk at Axum*. Plate 13 in Vol. 4, Book V, Chapter 5, at p. 321, in Bruce: *Travels* ..., (1790). The scale shows that Bruce estimated the stela to be approximately 60 feet (c. 18.30 m) high and rendered the architectural decoration incorrectly. The only architecturally decorated stela standing at the time of Bruce's and Balugani's visit was the one now referred to as Stela 3. It measures ca. 20.5 m and has eight bands of tall "windows" throughout the length and one row of square "windows" just above the false door. Scanned and reproduced from a copy of 2nd edition of *Travels* in the author's possession.

which we see the marks where stood the colossal statues of Sirius, the Latrator Anubis, or Dog Star. One hundred and thirty-three of these pedestals, with the marks of statues I just mentioned, are still in their in their places; but only two figures of the dog remained ... much mutilated, but of a taste easily distinguished to be Egyptian. ... There are likewise pedestals, where on the figures of the Sphinx have been placed ..." These vast and carefully shaped stone-slabs are still a prominent feature in several parts of Aksum. However, Bruce interpreted a still preserved and rather similar "pedestal" in front of the main church differently, it was, and is, surrounded by four columns: "Within the outer gate of the church [compound], below the steps ..." and shaped as a throne upon which "the king sits, and is crowned, and always has been since the day of Paganism." At this monument Bruce observed an inscription "though much defaced, may safely be restored' as a text in Greek with a reference to Ptolemy Evergetes."26

Bruce wrote about the main church of Aksum, Enda Mariam Zion (not mentioned by name, but identifiable from the description): "Two magnificent flights of steps, several hundred feet long,²⁷ all of granite, exceedingly well fashioned, and still in their place, are the only remains of a magnificent temple. In the angle of this platform where that temple stood, is the present small church of Axum, in the place of a former one destroyed by Mahomet Gragne,²⁸ in the reign of king David III;²⁹ and which was probably the

^{26.} Bruce (1790, 1805, 1813), Book V, Chapter 5. No later source mentions statues of dogs and sphinxes (Phillipson 1997; Chiari 2009). No Greek inscription mentioning Ptolemy Evergetes has been reported from Aksum, but inscriptions in Greek from the Antiquity exist, many referring to King Ezana (ruled c. 330-c. 370 A.D.).

^{27.} There are two flights of steps leading to the podium on which the present church stands, but much smaller than described by Bruce. Phillipson (1997); Chiari (2009) 28. This is Amad b. Ibrāhīm al-Gāzī ["Gragn"], mentioned above.

^{29.} The Emperor normally referred to as "Dawit III" ruled at Gondar 1716-1721; see "Dawit III" in Uhlig (2005). The ancient church in Axum was destroyed by Amad b. Ibrāhīm al-Gāzī ["Gragn"] around 1535 (Phillipson 2009, p. 38), during the

remains of a temple built by Ptolemy Evergetes, if not the work of times more remote." The church standing in this place at the time of Bruce's visit, as today, was, according to Bruce, "... a mean, small building, very ill kept and full of pigeons' dung. In it are supposed to be preserved the ark of the covenant, and copy of the law, which Menilek, son of Solomon, is said, in their fabulous legend, to have stolen from his father Solomon in his return to Ethiopia ... Some ancient copy of the Old Testament, I do believe, was deposited here [in the church in Aksum] ... But whatever this might be, it was destroyed, with the church itself, by Mahomet Gragne, though pretended falsely to subsist there still. This I had from the king himself."³⁰

According to *Travels* it was near Aksum that Bruce saw Abyssinian soldiers cutting and eating pieces of meat from a living cow. Even today this observation is not believed, or at least thought to represent a unique incident.³¹ From Aksum the party descended into the valley of the River Tacazze.³² Having crossed the Tacazze late January, 1770, they continued over the La-

rule of Lebna Dengel (1508-1540), who also adopted the throne name "Dawit"; see "Ləbnä Dəngəl" in Uhlig (2007). The early mediaeval church was seen and described before its destruction by the first Portuguese mission to Abyssinia; see "Alvares, Francisco" in Uhlig (2003).

30. In this place, Book V, Chapter 5, and elsewhere Bruce expressed the opinion that the religious object, which in the tradition of the Ethiopian Orthodox Church is said to be the true Ark of Covenant, was in fact an old Hebrew copy of the Law of Moses, which was lost during the wars with Amad b. Ibrāhīm al-Ġāzī ["Gragn"]. See also Bruce (1790, 1805, 1813), Book II, Chapter 6: "... Azarias, the son of Zadoc the Priest, ... brought with him a Hebrew transcript of the law ... the book itself was burnt with the church of Axum in the Moorish war of Adel ..." A scholarly discussion of the tradition about the Ark of Covenant being at Aksum has been given by Munro-Hay (2005).

- 31. Bruce (1790, 1805, 1813), Book V, Chapter 5, pointed out about the cow that "... it occurred to us all that it had been stolen." Contemporary Ethiopians suggest to the author that thieves or hostile soldiers might treat a stolen cow as described by Bruce; a righteous owner would certainly not.
- 32. The deep gorge of the Tacazze River forms a loop around the Semien Mountains. "Täkkäze" in Uhlig & Bausi (2010).

malmon Pass [present day Limalima Pass]³³ in the Semien Mountains³⁴ and reached the Imperial capital Gondar by the end of February, 1770. At that time the young Tekle Haymanot II³⁵ was Emperor. Other influential people at Gondar were Ayto Aylo,³⁶ Mantuab,³⁷ widow of Emperor Bakaffa, her daughter Aster (Esther),³⁸ and the Ras of Tigray, Michael Sehul,³⁹ then the real ruler of Abyssinia.

Bruce provided no portrait of Mantuab, his most important benefactor. There are, however, contemporary Abyssinian images representing her. She supported the building of the church of Narga Selassie on Dek Island in Lake Tana, where she is depicted in several places.⁴⁰ In *Travels*, Bruce described his first

- 36. Person not identified from other sources; presumably Ayto Aylu had the formal title "Abeto[hun]", later "Ato", and the name "Ḥaylu." "Ato" in Uhlig (2003); "Ḥaylu" in Uhlig (2005).
- 37. Mantuab ["Məntəwwab"; "Oh, what beauty!"] was the generally accepted nickname of Berhan Mogäsa (early 1700s-mid-1770s). She was influential at the court at Gondar during the mid-1700s. According to popular legend, also reported by Bruce, she came from Qwara [Qwara], west of Lake Tana, brought to Gondar by Emperor Bekaffa in the 1720's and was his consort in his later years. "Bäkaffa" and "Bérhan Mogäsa" in Uhlig (2003).
- 38. The second of three daughters of Mantuab. "Aster" in Uhlig (2003).
- 39. Ras Michael Sehul (c. 1691-1777). "Mika³el 'Səḥul'" in Uhlig (2007).
- 40. Di Salvo (1999) has reproduced a painting in the Gondar style showing Mantuab prostrate at the feet of Virgin Mary.

^{33.} Even today the road from the Tacazze Valley to Gondar winds its way up to and down from this pass, reaching altitudes of 3100-3200 m.

^{34.} The highest and most dissected mountain massif in Abyssinia, an eroded basaltic dome. The highest peaks are Ras Dashen (4500 m) and Mt. Bwahit (4330 m), but many others reach above 4000 m. "Somen" in Ulig and Bausi (2010).
35. Emperor Tekle Haimanot II (?-1777), ruled 1769-1777, was enthroned by Ras Michael Sehul (see following note) as the third Emperor in 1769, the two previous ones, Iyoas and Yohannes II, both murdered on the order of Ras Michael Sehul. Tekle Haimanot II continued as the nominal ruler of Abyssinia after the overthrow of Ras Michael Sehul at Sarbakusa, a battle witnessed by Bruce. "Täklä Haymanot I" in Uhlig & Bausi (2010).

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meeting with Mantuab at her palace at Qusquam,^{4r} a few kilometres west of Gondar, and his theological debate with her:⁴²

Our first discourse was about Jerusalem, the Holy Sepulchre, Calvary, the City of David, and the Mountain of Olives, with the situation of which she was perfectly well acquainted. She then asked me to tell her truly if I was not a Frank? "Madam," said I, "If I was a Catholic, which you mean by Frank, there could be no greater folly than my concealing this from you in the beginning, after the assurance Ayto Aylo has just now given; and, in confirmation of the truth I am now telling (she had a large bible lying on the table before her, upon which I laid my hand), I declare to you, by all those truths contained in this book, that my religion is more different from the Catholic than your's is: that there has been more blood shed between the Catholics and us, on account of the difference of religion, than ever was between you and the Catholics of this country; even at this day, when men are become wiser and cooler in many parts of the world, it would be full as safe for a Jesuit to preach in the market-place of Gondar, as for any priest of my religion to present himself as a teacher in the most civilized of Frank, or Catholic countries." "How is it then," says she, "that you don't believe in miracles?" "I see, Madam," said I, "Ayto Aylo has informed you of a few words that some time ago dropped from me. I do certainly believe the miracles of Christ and his apostles, otherwise I am no Christian; but I do not believe these miracles of latter times, wrought upon trifling occasions, like sports, and jugglers' tricks." "And yet," says she, "our books are full of them." "I know they are," said I, "and so are those of the Catholics: but I never can believe that a saint converted the devil, who lived, forty years after, a holy life as a monk; nor the story of another saint, who, being sick and hungry, caused a brace of partridges, ready-roasted, to fly upon his plate that he might eat them." "He has been reading the Synaxar," [collection of Orthodox hagingraphies] says Ayto Aylo. "I believe so," says she, smiling; "but is there any harm in believing too much, and is there not great danger in believing too little?" "Certainly," continued I; "but what I meant to say to Ayto Aylo was, that I did not believe laying a picture upon Welled Hawaryat [a grandson of Mantuab] would recover him when delirious in a fever." She answered, "There is nothing impossible with God." I made a bow of assent, wishing heartily the conversation might end there.

In Travels Bruce has described a number of events at Gondar and at Qusquam. These events included an undated, but savage Abyssinian feast which, according to Bruce, was so wild that his description of it was not believed in Europe. Bruce tired of staying at the Imperial court, and early in April, 1770, he and Balugani moved to Emfras⁴³ in order to prepare for an expedition to the source of the Blue Nile. Less than a month later the Emperor and his army suddenly appeared at Emfras. It was decided that Bruce and Balugani should follow the army southwards, along the eastern shore of Lake Tana, visit the Tissisat Falls on the Abay River (Blue Nile)44 and, if possible, move on to the source of the river. However, soon after a visit to the Tissisat Falls the army moved back towards Gondar along a westerly route around Lake Tana, and Bruce had to follow.

In the following months severe fighting and political intrigue blocked Bruce's journey to the area southwest of Lake Tana, where he had been told to find the source of the Abay. Due to rebellion, Tekle Haymanot II and Ras Michael had taken refuge in Tigray during the rainy seasons of 1770. Their absence from Gondar allowed the noble rebels Goshu⁴⁵ of Amhara, Wand

^{41.} Qusquam at Gondar is named for a site in Egypt where the Virgin Mary, Christ and Joseph are said to have stayed. It comprises a palatial building complex in Gondar style and a church; see "Q"ɔsq"am" in Uhlig & Bausi (2010).
42. Bruce (1790, 1805, 1813), Book V, Chapter 8. The conversation, one of many in *Travels*, is cited by Pankhurst (1965).

^{43.} At 12° 15' N, 37° 38' E. A district and a small town northeast of Lake Tana. "Anfraz" in Uhlig (2005).

^{44.} The Abay is the name for the Blue Nile in Abyssinia. The river leaves Lake Tana [Ṭana] at 11° 36' N, 37° 24' E, forms a big bend and leaves the Abyssinian Highlands at 11° 13' N, 34° 58' E. The Tissisat Falls are a range of waterfalls on the Abay River (Blue Nile) approximately 30 km south-east of where the river leaves Lake Tana. The river plunges over a c. 50 m high cliff of basaltic lava. "Ṭisəsat" in Uhlig & Bausi (2010). 45. Goshu of Amhara [Däğğazmač Goššu Wädağğe] (died ca. 1786), prominent aristocrat, originally supporting Ras

Bewossen⁴⁶, and Fasil⁴⁷ of Damot, to place a counter-Emperor, Susenyos II, on the throne in Gondar. On their return, Ras Michael Sehul and Tekle Haymanot II disposed of him and executed his supporters.

Finally, late in October, 1770, after a long rainy season, Bruce and Balugani managed to leave Gondar again and on the 4th of November, 1770, they reach what local people told him was the source of the Nile on a swampy mountain side south west of Lake Tana.⁴⁸ Following a route along the western shore of Lake Tana Bruce and Balugani returned to Gondar on Christmas Eve 1770. Sick of the general bloodshed in Gondar, Bruce was invited to stay at Mantuab's pal-

Michael, but opposed him in 1771. "Goššu" in Uhlig (2005). 46. Wand Bewossen [Däǧǧazmač Wänd Bäwäsan] (died 1777), prominent nobleman and warlord, married to a grand-daughter of Mantuab. In the beginning Wand Bewossen was loyal to Ras Michael, but his loyalty changed. "Wänd Bäwäsan" in Uhlig & Bausi (2010). 47. Fasil of Damot [Däǧǧazmač Fasil Wäräñña], Oromo chief.

The Oromo people moved northwards into the central and northern highlands of Abyssinia from what is today southern Ethiopia; see "Oromo history" in Uhlig & Bausi (2010). 48. Numerous rivers and smaller streams flow into Lake Tana, but for centuries Abyssinians have maintained that the source of the largest of these rivers, Gilgil Abay or Tinnish Abay ["Little Abay"], is the true source of the Abay [Blue Nile]. João Gabriel, a Portuguese captain based in Tigray, made an expedition to that area in 1600 and was probably the first European to see the spring. In 1618 a Spanish Jesuit, Pedro Páez, visited the source and wrote a description of it, which Bruce must have known, as it was quoted in a work in Latin by Kircher (1678), Vol. I, p. 73. In 1629 the Jesuit Jeróme Lobo also visited the source of the Blue Nile. Lobo was in contact with the Royal Society of London; Lobo's observations of the Nile were translated into English by Sir Peter Wyche, a member of the Royal Society, and published (Lobo 1669). When Bruce claimed to be the first European to visit the source of the Nile, the 1669-publication of Lobo's account was reissued with the following remark in the anonymous preface: "A later Traveller [Bruce], however, in various instances, asserted the ignorance of the Portuguese Missionaries, taxing them with wilful misrepresentation, and including them all under the polite appellation of *Lying Jesuits*!" (Lobo 1798). Also Prutky visited to the source of the Blue Nile before Bruce, in 1752 (Arrowsmith-Brown & Pankhurst 1991); see also "Nile" in Uhlig (2007).

ace at Qusquam during most of his remaining stay in Abyssinia. Sadly, Balugani died of dysentery on or shortly after the 15th of February. In May 1771 Ras Michael and the Emperor's army faced the rebels Goshu, Wand Bewossen and Fasil on three occasions at Sebraxos (Sarbakusa) not far south-east of Gondar. Bruce claimed that he took active part in all three battles and provided engraved maps of the battlefields. The victory went to the rebels, and they deposed Ras Michael from all official functions and took control of the country: While the Emperor was allowed to rule on as a figurehead, Ras Michael was sent to Tigray in chains.

Returned from the battles at Sebraxos, Bruce continued staying at Qusquam, away from the cruel politics at Gondar. In the autumn of 1771 he decided to return home. He was granted permission to leave Abyssinia and set off by the end of December, 1771, following a route towards the Sudan via Ras el Fiil (and Galabat and Metemma). In March, 1772, he left Abyssinian territory, travelling along the Rahab River in eastern Sudan and then along the Blue Nile, first to Sennar, where he stayed from April to September, 1772, and then onwards to the point where the Blue Nile met the White Nile, at the modern towns of Khar-

49. Hulton, Hepper & Friis (1991) have seen that that weather observations in Bruce's papers are in Balugani's hand until the 14th of February 1771, but after that date in the hand of Bruce; see Hulton, Hepper & Friis (1991), pp. 41-53. 50. The battles at Sarbakusa [also Sarbakwəsa, Bruce's Serbraxos], a town half between Gondar and modern Addis Zemen, at 12° 29' N, 37° 35' E], are mapped on Bruce's Plates 16, 17 and 18. The two first battles were indecisive, but the third forced Ras Michael and the Emperor to retreat to Gondar. It is now generally believed that Bruce was present at these battles; see "Sarbakusa" in Uhlig & Bausi (2010). 51. Ras el Fiil was a district in the western lowlands of Abyssinia. "Ras al-Fīl" in Uhlig & Bausi (2010). Galabat (in the Sudan) and Metemma (in Abyssinia; 12° 58' N, 36° 12' E) are two adjacent towns, which since early 18th century have existed at the border between the Sudanese province of Qadarif and Abyssinia. The towns developed as important trading links between Abyssinia and the Nile Valley. "Qallābāt" in Uhlig & Bausi (2010) and "Mätämma" in Uhlig (2007).

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toum and Omdurman. This point he reached late September, 1772, and noted about his observations in *Travels* that the Abiad River [the White Nile] "was larger than the Nile [the Blue Nile]", but stated that the "the Nile preserves the name of Bahar el Azergue, or the Blue River, which it got at Sennar." In this way he maintained that what he had seen south west of Lake Tana in Abyssinia was the source of the Nile.

After a gruelling trip through Sudan, the Nubian Desert and Egypt Bruce arrived at Marseille in March 1773, but remained in Italy for almost a year before returning to Britain. Finally arriving in London in June, 1774, after a stay in Paris, Bruce's descriptions of Abyssinia were met with disbelief. There were several reasons for this: firstly Bruce's boastful personality caused offence, secondly because some of his observations made in Africa were hard to believe because of their apparent strangeness, and thirdly because certain of his statements were factually wrong, for example his claim of having discovered places already described by the Jesuits.53 Particularly Bruce's description of the Abyssinian tradition of eating raw beef, with beef from a living cow as the extreme incident, was generally mistrusted.⁵⁴ Bitterly disappointed by the general mistrust and ridicule, Bruce retired to Scotland and married again in May 1776, this time to Mary Dundas, the daughter of another rich and influential Scottish laird from Stirlingshire.

Publication and results of Bruce's travels

Bruce only began working on his *Travels* after the death of his second wife in 1785. He dictated the enormous work from memory, only occasionally consult-

52. Bruce (1790, 1805, 1813), Book VIII, Chapter 10.
53. An example of the reaction to Bruce's treatment of the Jesuits is seen in the new preface to Lobo (1798).
54. A satirical cartoon by Isaac Cruikshank, showing entitled "An Abyssinian breakfast", was published in 1791 and is reproduced by Bredin (2000), pp. 194-195. It shows Bruce carving meat from a live cow desperately trying to escape. Tender, raw beef and mead (tej), as described by Bruce, is still consumed in Ethiopia as a delicacy; see "ṭäǧǧ" in Uhlig & Bausi (2020).

ing his journals and notes. His secretary, the Reverend Benjamin Latrobe, described how Bruce would dictate almost without a break from 8 a.m. to 9 p.m.⁵⁵ Finally, five volumes in quarto were published in 1790, nearly 20 years after the time in Abyssinia. The books contained engravings based on drawings from the journey,⁵⁶ many showing animals and plants and portraits of prominent Abyssinians.⁵⁷ Two new editions appeared after Bruce's death in 1794, edited by an Edinburgh scholar, Alexander Murray, and provided with commentaries and additional material from Bruce's and Balugani's original notes.⁵⁸

The results of Bruce's travels in Abyssinia are diverse. His descriptions of the situation in the country during his visit are valuable historical sources to the events in Abyssinia in the eighteenth century. This information is often influenced by Bruce's views of society: he speaks about Abyssinian nobility or royalty as he would of European nobility or royalty. In Abyssinia Bruce acquired old manuscripts or commissioned them to be copied. The most important were the Kebra Nagast⁵⁹ and the First Book of Enoch.⁶⁰ The former is a legendary description of the descent of the Abyssinian royal family from King Solomon and the Queen of Sheba. The second is an ancient Jewish religious text, a so-called pseudo-epigraph, ascribed to Enoch, the great-grandfather of Noah. The text of the First Book of Enoch is only completely preserved in Geez. Neither of these two texts was known in Europe, although already in the sixteenth century

^{55.} Hulton in Hulton, Hepper & Friis (1991), p. 38. 56. In the first edition of *Travels* (Bruce 1790) the plates are scattered through the volumes. In the two later editions

scattered through the volumes. In the two later editions (Bruce 1805, 1813) the text is in octavo and the plates are gathered in a separate volume in quarto. For discussion of authorship of the drawings, see Hulton, Hepper & Friis (1991), pp. 55-60.

^{57.} Reid (1968) has reproduced the original drawings of people at the court of Gondar on his Plate 6a and 6b. 58. Bruce (1805, 1813); Hulton, Hepper & Friis (1991), pp. 121-122.

^{59.} The title has been translated as "The Glory of Kings." Wallis Budge (1922); "Kəbrä nägäśt" in Uhlig (2007). 60. Charles (1893); "Enoch, Book of" in Uhlig (2005); "Pseudoepigrapha and Apocrypha" in Uhlig & Bausi (2010).

the Portuguese traveller Alvarez had reported on their existence. Other important manuscripts obtained by Bruce were Abyssinian royal chronicles. 6r He spent much effort on compiling a history of Abyssinia from the thirteenth century to the time of his visit; this vast compilation appeared in Travels just before the description of his arrival in Abyssinia. A collection of 35 manuscripts collected by Bruce are now the Bodleian Library at Oxford⁶² and an unknown number, given to Louis XV of France, are in the Biblioteque Nationale de France in Paris. 63 Bruce seems to have had considerable abilities as a practical linguist, 64 although not necessarily as a scholarly one. In Travels he reproduced a range of samples of Abyssinian languages. The archaeological observations in Bruce's work are unreliable, and so is his illustration of the still standing stela at Aksum. 65 Other drawings brought back from Abyssinia represent good draftmanship, but the range of subjects is not representative of what Bruce and Balugani must have seen. There are no drawings of landscapes or drawings of the characteristic Abyssinian ecclesiastic or secular architecture. The portraits of people represent only a few prominent Abyssinians; no ordinary Abyssinians were drawn. A few examples of arms are illustrated, but there is no example of everyday utensils. No example of the characteristic traditional Abyssinian painting is reproduced.

The best represented subject among the drawings reproduced in Bruce's *Travels*, and among other pre-

61. "14th-17th century" of "Historiography" in Uhlig (2007). 62. A catalogue of Abyssinian manuscripts in the Bodleian Library by Dillmann (1848) contains descriptions of 35 manuscripts, almost all of which were brought from Abyssinia by Bruce.

served drawings from the journey, is Abyssinian natural history. Balugani made close to 200 pencil or pen and ink drawings or watercolours, representing c. 180 Abyssinian plant species, often with notes in Italian about the plants, where they had been observed and records of local names and uses. Bruce did not make a herbarium, but he and Balugani collected seeds and bulbs of more than 50 species of plants, some of which germinated in botanical gardens in Italy and France. Information about 30 species of plants was given in Bruce's Travels, with engravings based on Balugani's drawings. In the Travels only one of these was named according to the Linnaean system, but the others were given scientific names by botanists of the day. There are only about 50 drawings of animals, of which 24 have been reproduced as engravings. These include mammals, birds, reptiles, fish and a fly. The original drawings of plants and animals were kept by Bruce's descendants, but most are now in the Yale Center for British Art in New Haven, USA.66 A genus of trees in the family Simaroubaceae (the quassia family) is named Brucea J.F. Mill. It was illustrated in Bruce's Travels, where it was mentioned that the plant was used against dysentery. A legume tree from the humid parts of Abyssinia was illustrated by Balugani and later named Erythrina brucei Schweinf. (1868). The observations on natural history made by Balugani are generally correct and show a keen and careful observer. Bruce's own observations on natural history are often more vivid, but also often confused. Murray explained this:⁶⁷

At the close of life, after twenty years repose, and much domestic affliction, the Author of these Travels seems to have viewed his former life as in a dream. Each interesting event found a glowing place in his descriptions, though indolence often prevented him from fixing, by his journals, the true time and place. If, however, this be not received as the full cause of the errors in ques-

^{63.} Hulton in Hulton, Hepper & Friis (1991), p. 35.
64. See comments on Bruce's abilities in Abyssinian languages in Salt (1814), pp. 334-335, based on the evidence from a learned local informant who had conversed with Bruce.
65. See Fig. 2. The stela seen by Bruce (1790), Vol. 3, Plate 13, is now called "Stela 3" and its current condition is illustrated by Phillipson (1997), pp. 27-32. The errors or inaccuracies in Bruce's representation are significant. See also the criticism of Bruce's descriptions of the archaeological remains and inscriptions at Aksum by Salt in Annesley (1809), vol. 3, pp. 177-202.

^{66.} Further about Bruce's collections of seeds and bulbs of plants, as well as the various collections of drawings from the journey, in Hulton, Hepper & Friis (1991), pp. 61-68. 67. Hulton, Hepper & Friis (1991), particularly pp. 61-68, but Bruce's lack of precise observations is noted elsewhere, for example p. 26. See also Murray's "Preface to the Third Edition" in Vol. 1 of Bruce (1813).

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tion, it may be mentioned that, in the particular state of the public mind at the time when Mr. Bruce returned from Abyssinia, few men could expect either notice or patronage, who did not describe their adventures as miraculous, and boldly pretended that they had left nothing undone. ...

Bruce's travel account was written both for the general reader, with descriptions of everyday life and conversations with important figures in Abyssinia, but also for learned readers, with long essays on specialised subjects, such as the observations on natural history and extracts of historical chronicles. Murray comments on the popular aspects of the *Travels*:⁶⁸

Another source of defect [of the *Travels*] is owing to a natural desire of rendering his work agreeable and popular. ... To the same cause must be ascribed, the freedom with which he has translated the conversation which passed between himself and the natives [of Abyssinia]. ... It is only a person who is acquainted with the Abyssinian language and phraseology, who can trace their authenticy.

Also a later editor of the *Travels*, Beckingham, has commented on this conflict between writing for the general reader and for the specialist. Beckingham's conclusion about the *Travels* seems a fair one:⁶⁹

... in spite of the magnitude of the achievement they record, the *Travels* are not often read to-day except by specialists, and it is not for them that Bruce wrote. They really comprise three books which might well have been published separately, the story of his own travels, a history of Ethiopia [Abyssinia] from earliest times to 1769, and a number of essays on very varied topics, such as polygamy, the origin of civilisation, the untruthfulness of Portuguese writers on Ethiopia [Abyssinia], and the effect of the Nile on the level of the land in Egypt. The history is inserted in the travel narrative on his arrival at Massawa while the essays are scattered throughout as more or less appropriate digression. The result is confusing, for it is easy to forget the identity of someone in a story that is so often

68. Bruce (1805, 1813), vol. 1, "Account of the Life and Writings of James Bruce, Esq."

69. Beckingham (1964), pp. 18-19.

interrupted. His topographical descriptions are not always easily understood, and, strangely enough considering his scientific interests, his map was inadequate; Murray, indeed, wrote in a letter to Salt that it "was laid down with shameful inaccuracy." The work [Travels] is very uneven in interest and value. His speculations on ethnography and ancient history were of little importance in his own day and are of less now. His own adventures, on the other hand, are told with a verve and sense of farce unsurpassed in the literature of travel. ...

Beckingham does not mention the excellent observations made on natural history, which must largely have been produced by Balugani. These observations were not properly represented in *Travels*. Nor were the valuable collection of old Abyssinian manuscripts given enough weight, although Murray tried to correct that in his editions of the *Travels*. These important aspects of Bruce's and Balugani's travels are mentioned by Hulton in an overall impression of their work:

... of his achievements, perhaps the two greatest, beyond his feats as an explorer, were the collection of Ethiopian manuscripts which he acquired or had copied and brought to the west; and the great quantity of drawings which he and Balugani created and which he succeeded in bringing out intact under the severest possible conditions.

Henry Salt, Nathaniel Pearce and William Coffin

Henry Salt (1780-1827) was English, the son of a medical doctor in Lichfield in Staffordshire. Salt had a considerable talent for painting and was trained in drawing, watercolour and oil painting. Set for a career as a portrait painter in London, he was at first not success-

^{70.} Murray cited extracts of the chronicles throughout his two editions of the *Travels*, including a longer summary in Bruce (1805, 1813), vol. 7, Appendix, Account of the Ethiopic MSS from which Mr. Bruce composed the History of Abyssinia, comprised in Book V of the Travels.

^{71.} Hulton in Hulton, Hepper & Friis (1991), p. 39.

ful.72 However, at an art exhibition in London in 1799 he met George Annesley (1770-1844; the son of an Irish Peer and the 9th Viscount Valentia).73 Annesley was acquainted with Salt's family, and, in spite of social differences, the two men developed a friendship. When Annesley soon after planned to make a journey to India, this friendship changed Salt's life and career. In 1802 Salt left England as secretary and draughtsman for Annesley. Although without a public position, Annesley had a keen interest in the Indian trade and was confident that he could improve it. During the visit to India, he convinced the British Governor-General of India⁷⁴ Richard Colley (1760-1842; Marquis of Wellesley, previous Earl of Mornington), that it would be beneficial to open commercial contact with Abyssinia, and he obtained the governor's support for an expedition to the western shores of the Red Sea. On board the Antelope, a ship provided by Wellesley, Annesley and Salt landed at Mocha in Yemen in April, 1804, accompanied by Annesley's servant William Coffin.75

In early May the *Antelope* reached the African shore of the Red Sea, while the crew mapped the many islands that did not appear on earlier European maps, including a reliable nautical map of the many Dahlac Islands. Salt visited Dahlac el-Kibeer, the largest and only inhabited island in the archipelago. After this, the *Antelope* went to Massawa, where Annesley, Salt and Coffin were well received by the Naib. How-

ever, the time of the year was too far advanced for further exploration, and the Antelope returned to India. Early in December, Annesley left India with another ship, the Panther. The ship reached Mocha late in December 1804. Nathaniel Pearce⁷⁸ (1779-1820), a sailor who had deserted the Antelope, was taken back into Annesley's service on the Panther and was to become an important partner for Salt's discoveries in Abyssinia and an independent and observant traveller in that country. In January 1805 the Panther reached Massawa and completed the survey of the Dahlac Islands, after which the ship returned to Mocha. Before leaving Massawa, Annesley had sent a message to the court of the Ras of Tigray, Ras Wolde Selassie,79 asking for further contact. At Mocha a reply from the Ras reached the party, inviting Annesley or a representative to come to Tigray. In July Salt could start towards Tigray, being the first European visitor to Abyssinia after Bruce. He set out from Arkeko, a small coastal town opposite the island of Massawa. Apart from Salt, the party consisted of three Europeans, including Pearce, and about twenty-five Arabs and Abyssinians. The party followed the same route as Bruce had taken, ascending to the highlands at Dixan.80 This and Salt's second journey in Abyssinia have been plotted on a modern topographical map in Fig. 3.

Already when at the coast, Salt had realised that centralised government in Abyssinia had disintegrated since Bruce's visit. In practice, the country had dissolved into three states, each ruled by an independent Ras. Nearest the coast was Tigray, with the town Aksum; further inland was Amhara, 81 and yet further in-

^{72.} Halls (1834); Manley & Rée (2001), pp. 1-9; "Salt, Henry" in Uhlig & Bausi (2010).

^{73. &}quot;Annesley, George" in Uhlig (2003).

^{74.} The Governor-General of India had at that time only direct control over Fort William, the government fortification in Calcutta, but supervised the private British East India Company and its officials in India.

^{75.} Manley & Rée (2001), pp. 11-66; "Coffin, William" in Uhlig (2003). The dates and years of Coffin's birth and death are not known. He served Annesley on the voyage to India and later Salt on the second journey to Abyssinia. At the request of the Ras of Tigray he remained in Abyssinia. In 1827 he was sent on a mission from Abyssinia to Egypt and returned to Abyssinia with a large supply of muskets and carabins. 76. An archipelago of c. 125 flat islands in the Red Sea off the port of Massawa. "Dahlak islands" in Uhlig (2005). 77. The local official representative of the Ottoman Turkish

Empire, governing the Red Sea coast along Abyssinia; see "Nā³ib" in Uhlig (2007). See also the note under Bruce about his problems with the Naib in Massawa.

^{78.} Pearce (1831); Manley & Rée (2001), pp. 22-66; "Pearce, Nathaniel" in Uhlig & Bausi (2010).

^{79.} Ras Wolde Selassie (1733-1815) ruled Tigray from the 1790s and into the early years of the 19th century. His capital was at Antalo in the south-eastern part of Tigray. "Wäldä Śəllase" in Uhlig & Bausi (2010).

^{80.} For Dixan, see note above under Bruce's journey. 81. Amhara was originally the name of the highland region bounded to the north and west of the Blue Nile (Abay River).

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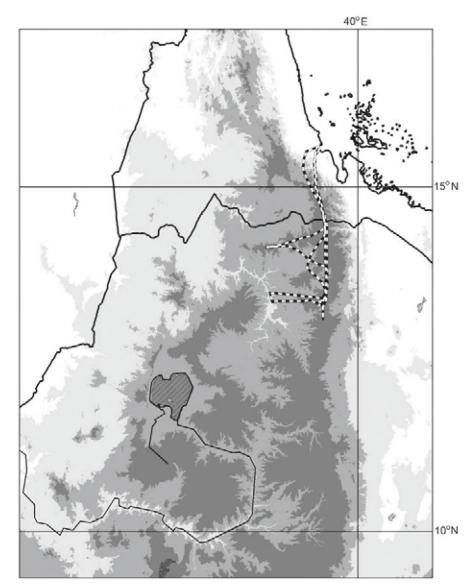


Fig. 3. Travel routes of Henry Salt in Abyssinia. Salt's two journeys took him to the eastern parts of Tigray, as far as the Tacazze Valley, with short journeys in western Tigray, where he visited the ancient town of Axum. The travels of his two assistants. Nathaniel Pierce and William Coffin, are not shown; they went to Lalibela, into the Semien Mountains and to Gondar. Altitudinal shading, modern country borders and rivers as in Fig. 1.

land and further south was Shoa.⁸² Through messengers, Salt communicated with Ras Wolde Selassie of Tigray, and by the end of August Salt reached his

Later, the Amhara region came to include all ethnic groups speaking Amharic, except those in the Kingdom of Shoa (see next note). Gondar was the most important town. "Amhara" in Uhlig (2003).

82. A political unit south of Amhara; the extent has changed much over time, but with its core area to the south of the Abay River; see "Säwa" in Uhlig & Bausi (2010).

court at Antalo, ⁸³ just south of the present-day Mekelle. ⁸⁴ Salt asked permission to visit Aksum, and in September he was able to spend four days there. He first visited the "Catacomb of Calam Negus" outside

83. At 13° 19' N, 39° 27½ E. "Antalo" in Uhlig (2003). 84. At 13° 29' N, 39° 28' E. In the second half of the 19th century Emperor Yohannes IV made Mekelle his capital. It soon overshadowed Chelicut and Antalo, the important centres at the time of Salt's visit. "Mäqälä" in Uhlig (2007).

the town.85 Their route into Aksum continued along the north-eastern stelae field and past the Aksumite water reservoir, both of which Salt briefly described.⁸⁶ The same day, and the following, Salt visited the main church of Aksum, the Enda Mariam Zion, which he described and illustrated, but, like Bruce, without mentioning its name. He studied and drew four columns and a throne base in front of the church and reported, like Bruce, that this was the place where the "old Abyssinian emperors were crowned." Nearby he noticed "other remains scattered about in different directions" - presumably the throne bases, the stone slabs which Bruce had taken for statue-bases. Salt also noted in front of the church "a broken stone with two spears ..."87 and a stone with an old Geez inscription.88 Salt was also shown a smaller stela with an indecipherable and much weathered inscription on one side and, on the other, an inscription in Greek characters, which he carefully copied.⁸⁹ He also prepared detailed descriptions and drawings of the erect and the fallen stelae. From the top of the hill above the ancient water reservoir he drew a plan of Aksum and noted on the other side of the hill an stela without ornaments and a row of "five pedestals or alters" similar to the ones in front of the church.90 Because of war Salt was

85. Described in detail by Salt in Annesley (1809), vol. 3, pp. 81-83. Now known as the "Mausoleum of King Kaleb and Gebre-Maskal".

86. The view in Fig. 4 shows the northern stele field, through which Salt entered Aksum, with the reservoir Mai Shum on his left. In the foreground the fallen architecturally decorated stela (now referred to as stela 2) and the architecturally decorated, still standing stela (now referred to as stela 3).

87. Now known as the "Stela of the lances", which Phillipson (1998) has identified as a fragment of a fallen stelae, Stela 4. Salt (1814) published a drawing of this fragment.

88. This is probably the inscribed stone now known as the "stone of Bazen" at the stairs leading to Enda Mariam Zion.

89. The so-called "Ezana inscription" is now in the Ezana Park. The slab has inscription in Greek, Epigraphic South Arabian and unvocalized Geez describing the victories of King Ezana. It is illustrated in both Annesley (1809) and Salt

90. These are also throne bases and the same as the "pedestals" which Bruce thought had supported Egyptian statues. They are illustrated in Annesley (1809), vol. 3, at p.

not allowed to travel to Gondar, and therefore he could not make contact with the Emperor of Abyssinia, a nominal ruler without political power. Instead Salt tried his diplomacy on the Ras of Tigray, and at the end of the visit Salt seemed to have convinced Ras Wolde Selassie that trade and friendly relations between England and Christian Abyssinia would be beneficial for both.

By the beginning of October the Panther had to leave, and Salt's party was forced to travel to the coast. Pearce was left behind with the Ras, in order to learn the language and make observations on the traditions of the country, as well as to create a feeling of good will towards the British.91 On the way back, Salt revisited Aksum for two days to check earlier observations and make new drawings of antiquities. From Massawa a dramatic sea voyage through the Red Sea followed, before the Panther could finally anchor at Suez in January 1806. After a stay in Egypt which does not relate to the subject dealt with here, Annesley's party reached London in October 1806, more than four years after they had set out. Salt's drawings and journals from the journey were incorporated in volume two and three of Annesley's Voyages and Travels to India, Ceylon, the Red Sea, Abyssinia and Egypt, a work published in three volumes in 1809.92 It was a general travel account, with many plates based on Salt's drawings. The plates from Abyssinia showed people, landscapes and religious and domestic architecture, as well as many monuments in Aksum. Separately, Salt produced a set of large coloured aquatints from the journey, which were sold as Twenty-four Views taken in St. Helena, the Cape, India, Ceylon, Abyssinia, and Egypt. Back in England, Annesley pushed the idea that England should establish trade links with Abyssinia to counter the risk of increasing French influence in the Red Sea after Napoleon's invasion of Egypt. Annesley's pressure worked, and in January 1809 Salt was sent back to Abyssinia with a Royal letter and presents to the Emperor of Abyssinia. The financial sup-

^{180,} and described in Salt (1814).

^{91.} Manley & Rée (2001), p. 32.

^{92.} Annesley (1809).

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Fig. 4. Henry Salt: The Obelisk at Axum. Hand coloured aquatint by D. Havell from drawing by Henry Salt, published as Plate no. XX [20] in Henry Salt: Twenty-Four Views in St. Helena, The Cape, India, Ceylon, The Red Sea, Abyssinia and Egypt. London: William Miller. 1809. The architecturally decorated and standing stela is the one shown in Fig. 2. The architecturally decorated, fallen and broken stela in the foreground is part of the second largest stela at Aksum, Stela 2; the fragments were removed to Rome in 1935, reconstructed and erected at Porta Capena, but returned to Aksum in 2005-2008. Many of the smaller stelae in the print are still standing. The view through the Northern Stelae Field and the valley behind is now blocked by fences and vegetation. To the right the Aksumite water reservoir, Mai Shum. Reproduced with permission from a copy at the Bodleian Library, Oxford, UK, Shelf mark 2034 a.2.

port for this mission came from the African Association, by then for the first time involved in the eastern part of Africa.⁹³ Although the ship, the *Marian*, was

ready to sail from Portsmouth in January, it could only leave in March due to bad weather. Via the Cape the *Marian* preceded to Mozambique, where it arrived

93. Association for Promoting the Discovery of the Interior Parts of Africa, usually referred to as the African Association; see "The age of the African Association, I, 1788-1802" and "The age of the African Association, II, 1802-15" in Hallett (1965). Rubenson (1976)

has confirmed the conclusion that the contact between the British government via Salt and Wolde Selassie was taken on British initiative to counter French interests in the regions around the Red Sea.

in August and continued to Mocha, arriving early in October.

Pearce, who had remained with the Ras of Tigray since Salt's first journey,⁹⁴ was supposed to come down to the Red Sea coast to meet the party, but November went by without his arrival, and Salt discovered that the first messenger to the Ras had died on the way. Salt therefore sent Coffin, and in February 1810 a big party, including Salt, Pearce and Coffin, could start for Tigray from Massawa via Dixan. In March the party reached Chelicut,⁹⁵ where Ras Wolde Selassie received them. Also on the second journey Salt was unable to reach Gondar. The presents of ammunition and arms intended for the Emperor were instead delivered to the Ras of Tigray.

Salt, Pearce and Coffin were allowed to travel to the Tacazze Valley in a direction south west of Chelicut. The towering Semien Mountains were visible on the other side of the deep valley, but it was impossible for Salt to visit them. In April, the Ras, his retinue and Salt's party moved to Antalo. By early May, Salt was ready to depart, leaving Pearce and Coffin behind, with the solemn promise from the Ras that he would protect them during their stay in Abyssinia and allow them to go, should they want to return to England. On the way back, Salt was able to pay a visit to Aksum to check his observations from four years earlier, and additionally visit old temple ruins at Yeha.⁹⁶ Reaching Massawa before the end of May, the Marian was not in sight, and the party had to cross to Mocha on a dhow. Eventually, the ship arrived and sailed the party to Bombay. Leaving Bombay in October, the Marian reached England in January 1811. In 1814 Salt published A Voyage to Abyssinia, 97 again a publication for the general reader with a description of the journey, maps, engraved plates based on his drawings from the second journey and a number of appendices with observations on language and natural history.

Although Salt remained friendly towards Abyssinia for the rest of his short life, he was never able to return or to have much further contact with the Christian Abyssinian highlands. Shortly after the publication of A Voyage to Abyssinia, in 1815, he was appointed British consul-general in Egypt and became a collector of Egyptian antiquities for the British Museum in London. In 1816, together with the traveller John Lewis Burckhardt,98 he employed a Venetian, Giovanni Baptista Belzoni, to remove a colossal bust of Ramses II from Thebes.⁹⁹ This bust was presented by Salt and Burckhardt to the British Museum in 1817, and is now one of the largest Egyptian exhibits in that Museum. Salt himself excavated antiquities at Thebes in 1817, and he paid Belzoni to excavate the great temples at Abu Simbel that were at that time covered by sand. Salt remained in Egypt after selling his collections of antiquities, but died in 1827, at the age of only 47·100

Results of Salt's visits

Because of the mistrust that had met Bruce's observations in England, a major task for Salt was to test as many of Bruce's observations as possible. Some could be objectively tested by visiting places where Bruce had been, for example the monuments of Aksum. Other testing consisted of interviews with Abyssinian nobility and scholars that had met Bruce. One of Salt's informants, Dofter Ester from Chelicut, is quoted and portrayed in Salt's *Voyage*. For Salt concluded

^{94.} Pearce (1831); Manley & Rée (2001), pp. 47-50; "Pearce, Nathaniel" in Uhlig & Bausi (2010).

^{95.} At 13° 21' N, 37° 37' E. Chelicut is now an insignificant village in southern Tigray, south of Mekele, but was important during the time of Ras Welde Selasie. "Čäläqot" in Uhlig (2003).

^{96.} The monuments at Yeha are described in Chiari (2009). 97. Salt (1814).

^{98.} For a biography and description of the methods of Burckhardt, see Hallett (1965), pp. 366-378.

^{99.} Manley & Rée (2001), pp. 82-100

^{100.} Halls (1834); Manley & Rée (2001), pp. 267-269; "Salt, Henry" in Uhlig & Bausi (2010).

^{101.} Dofter Esther, portrayed in Salt (1814), opposite p. 333, had personally met Bruce on several occasions, and stated that Bruce was accepted at the court in Gondar, Bruce had cured children of nobles, Mantuab had taken Bruce under her protection, and Woyzero ["Ozoro"] Esther had been much attached to him. Bruce did not speak Tigrinya and did not

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that most of Bruce's observations on contemporary Abyssinia could be verified, with the exception of some exaggerations and claims. Sir Walter Scott reported from a conversation with Salt:¹⁰²

He [Salt] corroborated my old acquaintance Bruce in all his material facts, he thinks that he [Bruce] considerably exaggerated his personal consequence and exploits, and interpolated much of what regards his voyage in the Red Sea.

Being a highly competent draughtsman, Salt's portraits of Abyssinians appear to be more correct and less Europeanised than the portraits reproduced in Bruce's works. As with Bruce, Salt's description of contemporary Abyssinia is a valuable historical and geographical source. Salt's view on the social structure in Abyssinia was markedly influenced by his respect for British nobility and views on the stratified British society, although less rigid than Bruce's views had been. Salt's and Bruce's interests in and contribution to Abyssinian history and archaeology are notably different. Bruce took great interest in the written history, was a keen collector of manuscripts and compiled personally a historical account from sources he had brought from Abyssinia. Salt collected few historical or religious manuscripts, although a manu-

have a good knowledge of Geez. At first he did not speak Amharic well, but improved it greatly during his stay. He spoke Arabic with Muslims. Both Bruce and Balugani had been at the source of the Gigil Abay together. Balugani died some time after the return to Gondar. Bruce was excellent on horseback, and had been present at the battles of Serbraxos, but had not directly taken part in the fighting. Bruce and Ras Michael had been on friendly terms, but Bruce exaggerated the generosity of the Ras. Bruce sometimes resided at Qusquam, the palace of Mantuab; in Gondar he lived in a house near the church of Kedus Raphael and close to the Imperial compound. Bruce had often asked to be made governor of Ras el Feel, the border province with modern Sudan, but he had not received this distinction. Dofter Esther confirmed the eating of raw beef in Abyssinia, but assured that he had never seen meat been cut from a living cow and showed great abhorrence at the thought. 102. From a letter from Sir Walter Scott to Lady Abercorn, cited by Beckingham (1964), p. 17.

script of musical interest, said to contain hymns of the Abyssinian saint, St. Yared, credited with the invention of the liturgical music of the Ethiopian Orthodox church, was said to be "now in the author's possession." Salt also ventured into speculations about the ancient history of Abyssinia, taking the monuments at Aksum as his starting point. With regard to archaeological observations, Salt carefully reexamined the monuments at Aksum described by Bruce, and added many new and better observations. Undoubtedly, Salt's studies at Aksum can be seen as a forerunner of his later and much better known archaeological work in Egypt.

Salt brought drawings back from Abyssinia, but, as opposed to Bruce and Balugani's drawings of objects of natural history, they were mainly landscapes with figures, portraits or drawings of objects. All the drawings are in the somewhat romantic style of the time; the landscapes are dramatic and inhabited by human figures dressed in often spectacular Abyssinian clothes and engaged in the busy activities of daily life at all social levels. Salt's observations on archaeology, architecture of ancient buildings and old inscriptions are illustrated both in Annesley's work and in his own Voyage. The main church in Aksum, Mariam Zion, was first illustrated in Annesley's book, where Salt also published the first plan of Aksum, together with drawings of a selection of Aksumite stone monuments. 105 An illustration in his Voyage shows the first published ground plan of an early mediaeval rockcarved church in Tigray, Abreha-wa-Atsbeha, 106 called

^{103.} Illustrated in Salt (1814), opposite p. 302. About St. Yared, see "Hymns" in Uhlig (2007).

^{104.} A dissertation by Salt on the Aksumite kingdom and the early history of Abyssinia was published in Annesley (1809), vol. 3, pp. 242-258.

^{105.} The plan of Aksum is published in Annesley (1809), vol. 3, at p. 82, the drawing of the church at p.87. At p. 180 is a plate with the stela with the house (now called Stela 7), a plate from the base of a stela, three throne bases, and the base of an Axumite column.

^{106.} Salt (1814), opposite p. 302. It is a large rock carved church from the 12th century with five aisles and three bays. "Sérac Abrəha wä-Aşbəḥa" in Uhlig & Bausi (2010).

Abha os Gabbha or Abhahasuba by Salt. This rockcarved church is still well preserved today, and it is clear that Salt's ground plan is too schematic and not correct. Salt also reproduced drawings of Aksumite gargoyles from the old church of Enda Maryam Zion, as well as of the unique stela-fragment with lances. 107 At Chelicut Salt commissioned a local painter to make a traditional Abyssinian painting, which he brought back from his second journey and reproduced in his Voyage. It shows a stylised battle scene in traditional Abyssinian eighteenth century Gondarene style and is the first published example of that kind of Abyssinian representative art. 108 Unlike Bruce's Travels, both Annesley's and Salt's Voyage contain illustrations of Abyssinian domestic architecture: the residence of the Ras at Antalo, Pearce's traditional round Abyssinian stone-house in Chelicut and others. Salt reproduced drawings of Aksumite inscriptions from Axum: the "Stone of Bazen" near the stairs to Enda Mariam Zion and the Greek inscription of King Ezana. Tog On his second journey Salt also saw and illustrated ancient inscriptions at the temple of Yeha in Epigraphic South Arabian scripts.110 He also made drawings of objects of everyday life (umbrellas, pots, traditional clubs, etc.), musical instruments,^m as well as a traditional Abyssinian gold ornament."2 Salt's linguistic abilities with regard to everyday conversation in Abyssinia seem to have been less developed than Bruce's, but he provided multilingual glossaries with up to nearly 200 words from each of approximately fifteen languages of the region.¹¹³ Salt made no plant drawings or observations on indigenous names or uses of plants, but he collected a herbarium, the first made in Abyssinia. Close to 500 plant specimens collected by

him are still preserved at the Natural History Museum, London.¹¹⁴ He published a list of 146 new names for previously unnamed plant species, which was provided by Robert Brown, botanist at the Natural History Museum.¹¹⁵

Salt was probably not as deeply interested in natural history as in archaeology, but he had instructions from England to make collections of plants and animals and did so.ⁿ⁶ A plant genus, Saltia R. Br. ex Moquin, is named after him; the genus has only one species, Saltia papposa (Forsskål) Moquin, known from the southern part of the Arabian Peninsula. A small number of species of vascular plants have also been named after Salt. 177 Salt published two illustrations of animals in Voyages. 18 One shows an Abyssinian bird, in the text called Erodia amphilensis, but the bird in the illustration is easily recognized as a Crab Plover (*Dromas ardeola*), described already in 1805. The Crab Plover occurs along the shores of the Red Sea and the Indian Ocean. Another shows a locust called "Abyssinian locust"; it can be identified as either the Migratory Locust (Locusta migratoria) or the Desert Locust (Schistocerca gregaria). In Voyages Salt also published short descriptions of mammals and birds. These descriptions were mostly given to him by Lord Stanley (see below). His collections of marine animals from the Red Sea were donated to the Museum of the Royal College of Surgeons in London, together with skins and skeletal parts of terrestrial mammals; all are now in the Natural History Museum in London.^{ng}. Most of the species in these collections were already known to science, except for the skin of a small antelope from the Red Sea

^{107.} Salt (1814), plate opposite p. 408.

^{108.} Salt (1814), opposite p. 394. "Painting" in Uhlig & Bausi (2010).

^{109.} Two versions were published: in Annesley (1809), vol. 3, at p. 181, and in Salt (1814), p. 408 and opposite p. 411.

^{110.} Salt (1814), figures in the text on pp. 431-433. This

inscription is still preserved at Yeha. III. Salt (1814), opposite p. 408.

^{112.} Salt (1814), opposite p. 302.

^{113.} Salt (1814), Appendix 1.

^{114.} Friis (2009a, 2009b). Vegter (1986) gives no number of plant specimens collected by Salt. The number given here is estimated.

^{115.} Salt (1814), Appendix IV, List of new or rare plants collected in Abyssinia during 1805 and 1810.

^{116.} Largen (1988).

^{117.} Amberboa saltii (Philipson) Soják (1962) [=Centaurea saltii Philipson (1939)]; Convolvulus saltii Steud. (1840); Sida saltii Steud. (1841); Trachyandra saltii (Baker) Oberm. (1962) [Anthericum saltii Baker (1876)].

^{118.} Salt (1814), plate opposite page lxiii.

^{119.} Largen (1988).

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coast, which is now called Salt's Dikdik (Madoqua saltiana). Apart from a few specimens that went to London, Salt's bird collection (84 bird skins) was sent to the British ornithologist John Latham, and it is his notes on the collection that were reproduced by Salt through Lord Edward Smith Stanley (13th Earl or Darby), who became the owner of the collection. 120 39 bird skins in the Liverpool Museum can still be identified as being part of Salt's collections from Abyssinia. The collection of birds included 35 taxa new to science, including species of parrots, bee-eaters, woodpeckers, kingfishers, weavers and sunbirds.121 Some of these have been given species epithets referring to Salt. Salt's two travel accounts were, like Bruce's Travels, written for the general reader, but the style is less subjective than Bruce's. Salt's descriptions of his observations are written in a straightforward language and can generally be read without insight in specialised terminology. Pearce, who travelled more widely than Salt in Abyssinia, including visits to the rock-carved churches at Lalibela, the Tacazze Valley and the Semien Mountains, also published an account in two volumes of his life and travels in Abyssinia. These two volumes contains many observations of life at court and everyday life in Tigray and an account of the visit which Coffin, Salts other assistant, managed to make to Gondar. Again the language is straightforward and without use of specialised terminology.122

Eduard Rüppell

Eduard Rüppell (1794-1884) was German, born in Frankfurt am Main. His father was a high-ranking civil servant, *Oberpostmeister und Finanzrat*, but also partner in Rüppell und Harnier's Bank in Frankfurt. The young Eduard learnt banking, but was more interest-

120. Salt (1814); in Appendix IV, pages l-lxii. Salt published the text he had received about his birds under the heading: Additional remarks on these birds, communicated to me by the nobleman in whose collection they are now deposited.

ed in travel and natural history and, financially independent, he travelled to Egypt in 1817, where he met Henry Salt and the Swiss-German traveller Ludwig Burckhardt. About one quarter of Rüppell's six weeks in Cairo was spent exploring Giza and the Pyramids with Salt. In 1818 Rüppell was elected member of the Senckenbergische Naturforschende Gesellschaft (founded in Frankfurt 1817; now Senckenberg Gesellschaft für Naturforschung), and studied natural history at universities in northern Italy.¹²³

Rüppell's journey to Egypt was followed by a longer scientific expedition in 1823-1825 to Nubia, Kordofan and Arabia Petraea, during which Rüppell was accompanied by various artists, hunters and taxidermists, particularly the German surgeon Michael Hey from Rüdesheim. After that scientifically fruitful journey Rüppell returned to Cairo and attempted a voyage by ship along the western coast of the Red Sea via the town of el Tor on the Sinai Peninsula. In this area, where Forsskål had also worked, Rüppell collected fish and invertebrates. Via a number of other localities along the shores of the Red Sea, Rüppell's party reached Massawa late in 1826. Here they had an extended stay, but attempts to reach the Abyssinian highlands were not successful, mainly due to the illness of some of the members of the party. In June 1827 Rüppell and his party left Massawa and returned by sea to Europe via Egypt. The return to Germany was dramatic; Rüppell's ship escaped after having been occupied by pirates for nearly two weeks. In the following years Rüppell worked on his collections and published scientific accounts with descriptions of the animals, 124 as well as a travel account for the general, but educated readers. 125 Encouraged by the results of the 1823-1827-expedition, and with an interest in Abyssinia raised by having met Salt in Egypt, Rüppell set out on an expedition to the Abyssinian highlands

^{121.} A thorough discussion of Salt's bird collection, and what is now preserved of it, by Largen (1988).

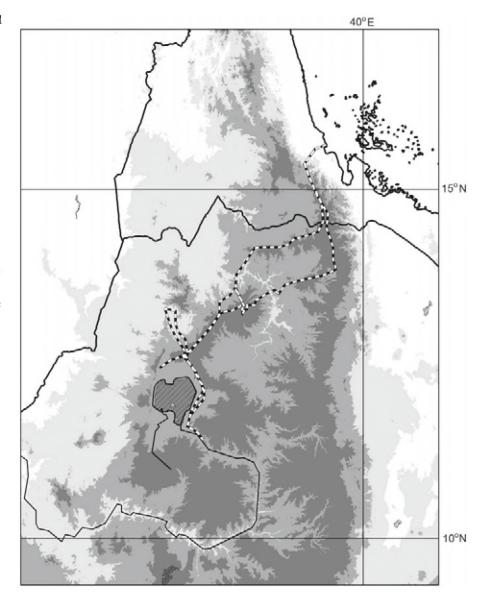
^{122.} Pearce (1831); "Pearce, Nathaniel" in Uhlig & Bausi (2010).

^{123.} Mertens (1949); "Rüppell, Eduard" in Uhlig & Bausi (2010).

^{124.} Rüppell (1826-1830), a work which deals entirely with the animals of the expedition, including the fish collection from Massawa.

^{125.} Rüppell (1829).

Fig. 5. Travel route of Edouard Rüppell in Abyssinia. On the journey to Gondar and Lake Tana Rüppell followed an eastern route through the Temben, crossing the Tacazze River and ascending the Semien Mountains from the east. Rüppell sent assistants from Gondar towards the northwestern shores of Lake Tana, descended himself into the river valleys and lowland north-west of Gondar, made a journey along the eastern shore of Lake Tana to the Blue Nile and returned towards the Red Sea via a route west of the Semien Mountains and through Axum. Altitudinal shading, modern country borders and rivers as in the map in Fig. 1.



which lasted from 1830 to 1834. This time the preparation of the scientific material was to be taken care of by a young German named Theodor Erckel, later keeper of the collections at the Senckenberg Museum. The expedition went via Leghorn to Egypt. After climbing Mt. Sinai the party continued via Tor on the Sinai Peninsula, and Yambo, Jidda and Gomfuda on the Arabian coast. In September 1831 the party landed at Massawa, where it had its base there for more than half a year, collecting plants and animals from the Red Sea, on excursions to the Dahl-

ac Islands and inland to Arkeko and other places previously visited by Bruce and Salt. Furthermore, Rüppell took interest in Abyssinian archaeology and was successful in reaching the ruins of Adulis, the Red Sea harbour of the old Aksumite Empire.

Back in Massawa the party joined the caravan of the influential Abyssinian trader Genata Mariam from Gondar. The route of Rüppell's party in Abyssinia has been plotted on a modern topographical map in Fig. 5. Leaving Massawa in April 1831, Ganata Mariam's caravan consisted of 49

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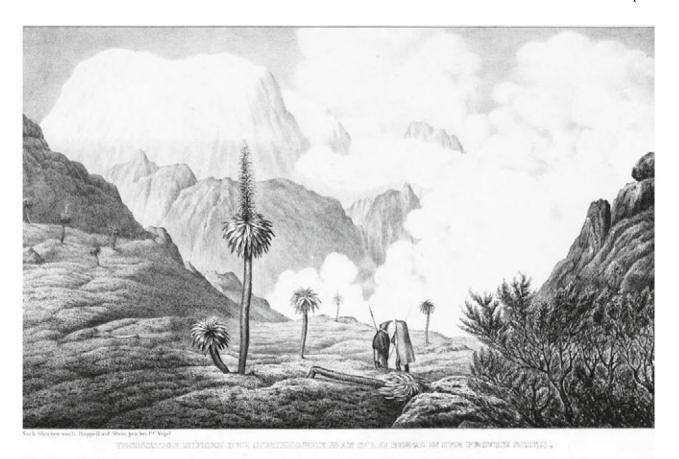


Fig. 6. Edouard Rüppell: Vegetation untern der Schneegrenze am Selki in der Provinz Simien. [Vegetation below the snow line at Mt. Selki in the Semien Province]. Lithograph in Plate 6 in Abbildungen zur Reise in Abyssinien [Illustrations to the journey in Abyssinia] (Rüppell 1838-1840), drawn by F.C. Vogel after a sketch by Rüppell. The illustration shows the thick grass sward covering rocks above 4000 m, with scattered rosette plants of Lobelia rhynchopetala and shrubs of Erica arborea. The human figures are dressed for protection against the cold and the mist. Reproduced with permission from copy in Univ.-Bibliothek Frankfurt am Main, shelfmark Gg 70/10.

camels and 40 mules and donkeys and followed a route into Abyssinia that was close to the route Salt had taken towards Antalo. Rüppell made a stop near Halai,¹²⁶ the first town in the highlands. At a tiny village of Gunna Kuma, Rüppell observed old biblical manuscripts in Geez and became deeply interested in that kind of documents. In late May he reached the town of "Ategerat", now Addigrat.¹²⁷ Due to rumours about civil war

along the main route the caravan turned further to the south into the southern Tigray region of Temben¹²⁸. After two months journey from Massawa, the caravan descended into a deep valley of a tributary to the Tacazze River, where Rüppell for the first time could observe snow-covered peaks in the

early 19th century. "cAddigrat" in Uhlig (2003). 128. "Tämben" in Uhlig & Bausi (2010). The small town of Takeraggio, which Rüppell mentioned as capital of Temben, cannot now be traced; the same is the case with Rüppell's other localities in Temben.

^{126.} At 15° or' N, 39° 20' E. "Halay" in Uhlig (2005). 127. At 14° 16' N, 39° 27' E. The town became important in the

Semien Mountains behind the valley. Having crossed the Tacazze River, the caravan followed the narrow Ataba Valley into the Semien Mountains. As the caravan ascended, Rüppell was able to study the unique fauna and flora of the high mountains of Abyssinia: the Gelada Baboon, the Walia Ibex and the Giant Lobelia (Lobelia rhyncopetalum). By early July the caravan had reached the Selki-pass and climbed the upper slopes of Mt. Buahit, one of the highest peaks of the Semien, which Rüppell measured to be more than 4100 m high (the peak is actually 4437 m above sea level), and the almost equally high Mt. Abba Jared. The high mountain peaks of the Semien were covered with snow and the zone just below the snow-line was covered with a type of vegetation not seen before in Africa. 129 In early July the caravan was divided into two: one heading directly towards Gondar, the other to Enschetkab, the small provincial capital of the Semien. 130 Rüppell's party stayed at Enschetkab for nearly two months and collected animals and plants from the Alpine zone of the Semien. The party also made short excursions in several directions from the little mountain town, including trips to the Bellegas Valley in the western part of the Semien. When in Enschetkab, Rüppell frequently visited Shellika Getana Jasu, the governor of Semien, whom he treated for various ailments.

The onward journey to Gondar was troubled by a rebellion, and it was only possible to proceed with a substantial escort of soldiers sent from Gondar to protect the caravan, which left Enschedcap in the beginning of October. The route towards Gondar followed the valley of the Bellegas River towards Debark,^{13t} at which point they turned in a south-western direction, following

129. Fig. 6, showing the Afroalpine vegetation at Mt. Selki in the Semien Mountains.

Bruce's route over the Lamalmon Pass [present day Limalima Pass] to Gondar. By mid-October, the party made a grand entry into Gondar. First came twenty Abyssinian musketeers, then Rüppell himself, dressed in a scarlet cloak, a gift from the governor of Semien. Then came a group of merchants from Gondar, including Getana Mariam, and further behind a group of servants who took care of the natural history specimens packed in leathercovered baskets and carried by mules. In Gondar Rüppell was received in audience with the Emperor Aito Saglu Denghel¹³² and became friend of the judge Lik Atkum,133 who was an erudite scholar and interested in contact with Europeans. Atkum had compiled a history of Abyssinia, which he copied for Rüppell, together with other valuable Abyssinian manuscripts present at Gondar. Soon after his arrival in Gondar, Rüppell sent some of his assistants on a collecting trip along the north-western shore of Lake Tana around the small town of Deraske. With more assistants he made a long collecting trip, lasting from December 1832 to January 1833, to the hot lowlands northwest of Gondar, as far as the lower Angereb River. Here the party was able to collect specimens of large mammals for the Natural History Museum of the Senckenberg Society in Frankfurt, including elephant, buffalo and antelopes, and Rüppell observed the extensive grass fires that are characteristic for the Combretum-Terminalia woodlands of the western Abyssinian lowlands. The collections from this excursion were so heavy and bulky that all the mules in the caravan were needed to carry them; everyone had to give up riding.134

^{130.} The capital of Semien in the 19th century. Enschetkab is difficult to trace on modern maps, but is located at 13° 06' N, 38° 09' E. "Ančät Kab" in Uhlig (2005).

^{131. 13° 09&#}x27; N, 37° 54' E. Debark is a town and a district on the western extension of the Semien Mountains on the main route from Adwa and Aksum to Gondar. "Däbarq" in Uhlig (2005).

^{132.} Nominal ruler of Abyssinia 1832-1840, 1842-1843, 1846-1850 and 1852-1855. "Śahlā Dəngəl" in Uhlig & Bausi (2010). 133. Several later European travellers met Lik Atkum (c. 1770-c. 1840), also called Liq Asqu, and spoke about him with praise. His large, comfortable house, great library and garden with useful and ornamental plants are described by Rüppell, who also mentions that Lik Atkum's father and grandfather had met Bruce. "Aṣqu" in Uhlig (2003).

^{134.} Rüppell (1838-1840), chapter 6 in volume 2 deals entirely with the excursion to the lowlands north-west of Gondar.

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When the party returned to Gondar there had been extensive plundering in the town, but fortunately none of the collections had been damaged or stolen. Rüppell decided to continue collecting along the eastern shore of Lake Tana and along the uppermost part of the Blue Nile. His goals were the village and monastery of Kiratza¹³⁵ on the eastern shore of Lake Tana, and the old Deldei Bridge approximately 1.5 km below the Tissisat Falls on the Blue Nile.136 Rüppell's small party left Gondar late February 1833, and reached Kiratza after a few days. He soon realised that he would not be able to purchase what he had come for, a chronicle of Abyssinian history kept at the main church of the monastery at Kiratza. He therefore ordered a copy to be made and continued his journey in order to study and draw the Deldei Bridge. 137 On the return journey the party again stayed in Kiratza, waiting for about 10 days whilst the copy of the Abyssinian chronicle was finished. Returning along the eastern shore of Lake Tana the party reached Gondar, where Rüppell stayed until a caravan would leave by the middle of May. The return journey followed Bruce's route to Aksum via Debark and the Lamalmon Pass. There the caravan divided: the main group of the party with all the natural history col-

135. 11° 45¼' N, 37° 26¾' E. Kiratza, also spelt Qorata or Korata, is the name of a settlement, church and monastery on a densely forested peninsula along the eastern shore of Lake Tana. Today the settlement has lost its importance and inhabitants, but the church and monastery remain. "Qwäraṣʿa" in Uhlig & Bausi (2010).

136. "Deldei" means "bridge" in Amharic. The bridge visited by Rüppell is the upper of two 17th century bridges crossing the Blue Nile; it is only about 1.5 km below the Tissisat Falls, at 11° 29' N, 37° 35½' E. The lower bridge is located approximately 45 km below the Tissisat Falls at 11° 13' N, 37° 52½' E and is now partly collapsed. The two bridges were built during the reign of Susenyos in the early 17th century and were at the time of Rüppell still the only bridges crossing the Blue Nile.

137. Rüppell (1838-1840), Atlas, Plate 9. The Amharic name of the bridge [Yäṭis Wəha Dəldəy] means "the fuming water bridge" and refers to the Tissisat Falls above the bridge and the rapids in the river under it.

lections and manuscripts continued, heading towards Aksum, while Rüppell made a detour towards the Semien Mountains, where he met Dejazmas Ubi,¹³⁸ the ruler of Semien and Tigray. With promise from Dejazmas Ubi of free passage for men and collections to the Red Sea, Rüppell reached Aksum in the beginning of June and stayed in the town for a week to study the Aksumite monuments.¹³⁹ He was not impressed by Salt's observations and commented: "Some of the monuments have already been described rather inaccurately by Salt, while no report has been given on many other important ruins." [The present author's translation]. Bruce's observations are not mentioned. Rüppell went from Aksum to Massawa via Adwa, Halai and the Taranta Pass. In July 1833 the party sailed from Massawa via Jidda to Egypt, and Rüppell continued to Marseille and Frankfurt. This time he crossed the Mediterranean without attack from pirates, but sadly some of his collections from Egypt were lost on a Russian ship that sank near the French coast.

Results of Rüppell's visits to Abyssinia

Archaeological, ethnological, historical and other results relating to the humanities were described by Rüppell in his travel account, which also contains numerous observations of everyday life, as well as descriptions of everyday objects, farming and husbandry practices, etc. An important subject for Rüppell's studies was the type of Aksumite monuments which Bruce called "pedestals" and Salt "thrones", "pedestals" or "alters". Rüppell con-

^{138.} Ca. 1799-1867. His title and name are spelt in different ways, e.g. Deggazmach Webe Haile Maryam. "Wəbe Ḥaylä Maryam (Däǧǧazmač)" in Uhlig & Bausi (2010).

^{139.} Fig. 7, showing stelae at Aksum, in the foreground the fallen, architecturally decorated stela (now referred to as stela 2), behind the still standing stela (stela 3). These stelae, as they appear today, are shown in Fig. 8.

^{140.} Rüppell (1838-1840), vol. 2, chapter 10, which deals with the observations from Aksum.

^{141.} Rüppell (1838-40).

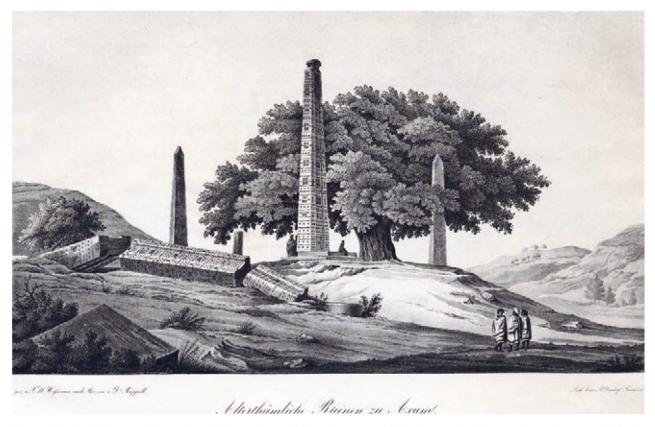


Fig. 7. Edouard Rüppell: Alterthümliche Ruinen zu Axum. [Old ruins at Axum]. Lithograph in Plate 10 in Abbildungen zur Reise in Abyssinien [Illustrations to the journey in Abyssinia] (Rüppell 1838-1840), drawn by the architect Friedrich Maxmilian Hessemer from a sketch by Rüppell. The lithograph shows a closer view than Fig. 4. The number of storeys on the fragments of architecturally decorated, broken stela agrees with those of the second largest stela at Aksum, Stela 2. The human figures wear traditional white clothes with embroidered brims. Reproduced with permission from copy in Univ.-Bibliothek Frankfurt am Main, shelfmark Gg 70/10.

cluded that the monuments were usually formed as flat stone slabs with a centrally placed square elevation, and near the edge of this elevation there were on three sides of the upper surface deeply carved furrows. According to Rüppell, this could be explained if the monuments were interpreted as alters for pagan sacrifices; the furrows would then work as drains for the blood from the sacrificed animals. The monuments are now interpreted as throne bases; the furrows on the three sides of the square elevations have supported other stone slabs that have formed the back and the sides of the throne.¹⁴² Rüppell also described the Aksumite wa-

ter reservoir and the Aksumite podium on which the main church in Axum stands. He saw the stone with reliefs of lances illustrated by Salt and cor-

at Axum and presents a general reconstruction of them. The

concordant with their having originally formed sides of such

dimensions of some, but not all inscribed stone slabs are

thrones, and the inscriptions sometimes refer to the erection of thrones. Bruce's statement that there were 133 of these "pedestals" in Aksum must be a vast exaggeration, allowing a significant loss since his visit. Chiari (2009) quotes three long inscriptions from throne bases and stone slabs associated with thrones. They all refer to a certain Daniel, who ruled Aksum in the 7th century AD or even later, and document that thrones were used centuries after the coming of Christianity. "Dano³el"

in Uhlig (2005).

^{142.} Phillipson (1997) accounts for 26 such throne-bases found

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Fig. 8. Stela 2 and Stela 3 at Aksum in 2009. Stela 2 is recrected in its original position to the left in the photograph. Stela 3, now slightly unstable, is balanced with a counterweight. Photo Ib Friis.

rectly interprets it as a fragment of a stela. [43] Of the erect stela with architectural decoration Rüppell says: "... in my opinion, the decoration has no artistic value, as it does not express an idea." [The present author's translation]. Like Bruce, he did not realise that the ornaments represented the design of Aksumite buildings; this observation was only made by scholars in the twentieth century. Among other monuments studied by Rüppell we can identify the mausoleum now referred to as the tomb of Kaleb and Gebre Maskal. [44] The most important new discovery in Axum made by Rüppell

was three inscriptions in Geez on large stone slabs; one was almost complete, the other somewhat damaged and the third very damaged. The texts describe the victories of King La San (Ezana) and the texts refer to pagan gods, so they are written before the introduction of Christianity. Abyssinian manuscripts were donated to Frankfurt

145. The text is shown in Rüppell (1838-1840, Atlas, Tab. 5) and a translation is given in Vol. 2, chapter 10. From the shape and dimensions, which Rüppell gives for the slabs, they may represent the sides or back of a throne. Although the inscriptions are similar to the ones on the still-preserved trilingual inscriptions relating to King Ezana (the Greek version was copied and published by Salt), they are not identical. The present author has not been able to trace the whereabouts and conditions of Rüppell's inscriptions today, if indeed they are preserved.

^{143.} Phillipson (1997) has shown that this stela-fragment fits with the Stela referred to as Stela 4, and has published a new reconstruction of that stela.

^{144.} Phillipson (1997, 1998).

Stadtbibliotek as "The Rüppell Collection."¹⁴⁶ Partly based on these written records Rüppell wrote a new and critical account of the history of Abyssinia. ¹⁴⁷

It is worth noting that Rüppell's attitude to the religious practises in Abyssinia is pragmatic and sympathetic to the followers of both the two main religions in the country, Christians and Muslims. His main concern is the influence of religion on how well the Abyssinian society functioned and how religion influenced people's moral attitudes. Having sketched the secterial conflicts in Abyssinia since the introduction of Christianity, he concluded:¹⁴⁸

I will not discuss the subtleties on which the schisms between the Christians sects in Abyssinia are based, partly because I have not made religious studies as my subject, partly because this is already done by the missionary Samuel Gobat^{r49} ... [The present author's translation].

Rüppell expressed his personal opinion about the religions of Abyssinia thus: "The people who confess the Muslim faith [in Abyssinia] are raised high above the Christians with regard to moral attitudes ..." He also concluded that European missionary activity in the Christian and Muslim parts of Abyssinia would do no good. What the Abyssinian people needed was not more religion, but more self-respect: "... from outside, the best way to support regeneration of the Abyssinian nation would be to write and distribute a *His*-

146. Goldschmidt (1897). The Rüppell collection of Abyssinian manuscripts consisted of 23 manuscripts when catalogued by Goldschmidt. During the Second World War the manuscripts were transferred from Frankfurt to safe keeping in Thüringen. When that location became part of the zone occupied by the Soviet Union the manuscripts were quickly relocated, but during the transfer six of the manuscripts were lost. In 2010 two of the missing manuscripts collected by Rüppell in Abyssinia were recovered after 65 years (information from *Universitätsbibliothek Johann Christian Senckenberg*, Frankfurt am Main).

tory of Abyssinia suitable for the moral and intellectual capacity of the inhabitants, in which book the history and rather honourable conditions of the country in the past should be given a prominent state ... in order to raise national feeling and patriotism among the Abyssinians." [The author's translation].

Rüppell primary task was to collect objects of natural history, and all his collections in these fields were significant. The plant collections were probably the smallest, but do include a range of important new species from the Alpine zone in the Semien Mountains, including the first specimens of the Abyssinian, and thus African giant lobelia to reach Europe. The herbarium from the journey was studied by G. Fresenius, 150 a specialist at the Senckenbergische Naturforschende Gesellschaft in Frankfurt, and about 100 new plant species were described in the years 1837-45. The collections in the herbarium probably number more than 200 specimens. 151 A plant genus, Rueppelia A. Rich., with one species, R. abyssinica A. Rich., was named after Rüppell, but it is now considered a synonym of the name Aeschynomene L. More than 25 species of vascular plants have been named after Rüppell.152 The collections of animals

^{147.} Rüppell (1838-1840), Vol. 2, chapter 13.

^{148.} Rüppell (1838-1840), Vol. 2, chapter 12.

^{149.} Samuel Gobat was a Swiss protestant missionary, who visited Abyssinia at the same time as Rüppell. "Gobat, Samuel" in Uhlig (2005).

^{150.} Fresenius (1837-1845). "Fresenius, Johann Baptist Georg Wolfgang (1808-1866)" in Stafleu & Cowan (1976), pp. 875-876.

^{151.} Mertens (1949); Lobin (1999); Friis (2009a, 2009b). Mertens stated that in 1831 Rüppell collected 150 plant species on Sinai, but the number of species collected in Abyssinia was much larger. Lobin (1999) lists 95 new species collected by Rüppell in Abyssinia, but he gives no information about the total number of botanical specimens collected by Rüppell in Abyssinia. No total number of Rüppell's plant collections is given by Vegter (1983).

^{152.} Plant species, almost all based on material from Abyssinia, named in honour of Rüppell, many published by Fresenius (1837-1845), are: Arctotis rueppellii O.Hoffm. (1895); Bidens rueppellii (Sch.Bip.) Sherff (1930); Bidens rueppellioides Sherff (1951); Brachyderea rueppellii Sch.Bip. (1867); Combretum rueppellianum A.Rich. (1847); Coreopsis rueppellii Sch.Bip. ex Walp. (Repert. Bot. Syst. vi.); Crepis rueppellii Sch.Bip. (1839); Crinum rueppelianum Fresen. (1837); Dianthoseris rueppellii Sch.Bip. (1842); Ethulia rueppellii Hochst. ex A.Rich. (1848); Eulophia rueppelii (Rchb.f.) Summerh. (1940); Gutenbergia rueppellii Sch. Bip. (1840); Gymnanthemum rueppellii (Sch.Bip. ex Walp.)

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from Rüppell's visit to Abyssinia are of the highest importance. He and a number of collaborators described the vertebrates in a series of general publications, 153 and later books on birds appeared. 154 From all his journeys in North East Africa and Arabia Rüppell himself described 32 new genera and 450 species of animals. 155 He was the first to collect and describe many of the now famous endemic mammals and birds from the high mountains of Abyssinia, especially the Semien. The type material¹⁵⁶ of the most of the unique fauna of Abyssinia, the "flagship species" for nature conservation in modern Ethiopia, including the Semien Wolf (Canis simensis Rüppell 1840), the Walia Ibex (Capra walie Rüppell 1835), and the Gelada Baboon (Theropithecus gelada Rüppell 1835), are in the Senckenberg Museum in Frankfurt. A genus of insects belonging to the stiletto flies, Ruppellia Wiedemann, as well as species of other animals, are named after Rüppell.

Comparison of the results of Bruce's, Salt's and Rüppell's travels

The length of time which the three travellers spent in Abyssinia was quite different. Bruce remained in Abyssinia for approximately 30 months, and travelled to areas where neither of the other two travellers went. Salt's first visit lasted nine months, his second seven months, and the areas in which he travelled were the

H.Rob. (1999); Haplocarpha rueppellii K. Lewin (1922); Ifloga rueppellii (Fresen.) Danin (1973); Landtia rueppellii Benth. & Hook.f. ex Vatke (1875): Launaea rueppellii (Sch.Bip.) Amin ex Boulos (1962); Lissochilus rueppelii Rchb.f. (1847); Pennisetum rueppelianum Hort (1895); Rhabdotheca rueppellii Sch.Bip. ex Schweinf. (1867); Schnittspahnia rueppellii Sch.Bip. (1842); Senecio rueppellii Sch.Bip. (1867); Sonchus rueppellii R.E. Fr. (1925); Sporobolus rueppellianus Fresen. (1837); Trichilia rueppelliana Fresen. (1837); Trichoseris rueppellii Sch.Bip. (1839); Trifolium rueppellianum Fresen. (1839); Verbesina rueppellii A.Rich. (1848); Vernonia rueppellii Sch.Bip. ex Walp. (1843).

most restricted of the three travellers. Rüppell stayed in Abyssinia for 23 months. He did not cover as large an area as Bruce, but went collecting in the lowlands north-west of Gondar, and, most important, was the first European to study the Afroalpine zone of Abyssinia in the Semien Mountains above 4000 m, areas that were completely new for European visitors. The Portuguese and Spanish Jesuits in the sixteenth and seventeenth century had not visited the Alpine zone of Abyssinia, and Bruce had not been above 3200 m at the Lamalmon Pass.

All three travellers went with traditional Abyssinian traders, using camel-, mule- and donkey-caravans, and all three travellers were strongly restricted by civil war and religious and political tensions in the country. For this reason all three travellers were dependent on armed escorts provided by strong rulers: Bruce on the power of Ras Michael Sehul, Salt on the power of Ras Wolde Selassie in Tigray, while Rüppell organised his travels in steps, having again and again to secure permissions and escorts for his onwards journey before he could continue. Dramatic events occurred in Abyssinia during the visits of all three travellers, but it is probably correct to say that most dramatic political turmoils occurred during Bruce's travels, events that initiated the steady decline in the central power of Abyssinia that was not halted before late in the nineteenth century. The observations of the explorers were often made in a kind of critical "dialogue" with their predecessors. Bruce knew the Jesuit observations from the sixteenth and seventeenth century, but dismissed them as lies. Salt was keen to demonstrate where Bruce had been right and where he had been wrong. Rüppell was often concerned with the verification or rejection of Salt's observations. All three travellers had assistants or helpers. Bruce had a brilliant assistant in Luigi Balugani, and although Bruce was generally the driving force behind the travels, the observations would have been far less successful without the meticulous work of Balugani. Salt was supported by other British observers, Pearce, who stayed behind in Abyssinia after Salt's first trip, and Coffin, who stayed behind with Pearce after Salt's second journey. Salt's observations were often better

^{153.} Rüppell (1835-1840).

^{154.} Rüppell (1842, 1845).

^{155.} Mertens (1949).

^{156.} Type material of a species is the material from which the species was first described.

founded than Bruce's, partly due to the fact that he was able to repeat and test his observations on two journeys and less likely to be carried away by his imagination than Bruce. The success of Rüppell was to some extent due to his scientific approach, his partial specialisation on natural history and the collection of manuscripts, but also due to his good field assistants and support from the Senckenbergische Naturforschende Gesellschaft. All three travellers had Abyssinian informants and helpers, and Rüppell's collection of manuscripts would not have been so successful without the determined help of an erudite local informant, the judge Liq Atkum in Gondar.

Topography, Geography and Mapping

The routes of the three travellers have been represented in Fig. 1, 3 and 5 of this paper. It is not surprising that these routes are those of the traditional Abyssinian traders, considering the difficulty of the terrain in the Abyssinian highlands. Today the main roads follow the same general pattern. 157 On his search for the source of the Nile, Bruce went along an established route along the eastern shore of Lake Tana and the River Abay to the Tissisat Falls and the source of the Gilgil Abay, while his return route to Gondar along the western shores of Lake Tana was less well trodden. Salt, on both his journeys into Abyssinia, followed Bruce's initial route from Massawa to the highlands and into Tigray, but turned southwards towards the residences of the Ras of Tigray. Rüppell's ascent of the Semien Mountains from the east does not seem to follow a widely used trade route, but the reason for this rather unusual ascent was civil war along the main routes. Rüppell's route to the lowlands northwest of Gondar, where he explored the fauna and flora of the Angereb River Basin, followed also a major caravan routes towards the Sudan. In their travelogues all three travellers gave an outline of Abyssinian geography with description of the provinces and

based on the best sources available, and all three provided maps based on this evidence. Of these Bruce's were the poorest and Rüppell's the best. Rüppell was the first to give a rough geological characterisation of Abyssinia, and also the first to give a preliminary physiognomic characterisation of the Abyssinian vegetation based on climatic observations.¹⁵⁸

Archaeology; Ruined Buildings

Bruce produced relatively few and often quite fanciful descriptions of ancient monuments. Salt corrected him, particularly with regard to additional detail and better descriptions of the monuments in Aksum. Salt also made observations on the mediaeval rock-carved churches in Tigray not seen by Bruce. Rüppell further improved the information about the monuments in Aksum and illustrated and made a first ground plan of the already then partly ruined Imperial enclosure at Gondar, where Bruce had met Ras Michael and Emperor Tekle Haymanot II. Rüppell was also the first to publish a drawing of the seventeenth century Deldei Bridge across the Blue Nile at the Tisissat Falls.

Ethnology; Agriculture; use of plants and husbandry

In the writings of all three travellers there are many observations on local traditions, conventions and habits. Bruce (or rather Balugani) took many notes on the names and traditional uses of plants, while the observations on agricultural practices and husbandry are surprisingly few in the writing by the other travellers.

^{157.} Map of commonly used trade routes with "Trade" in Uhlig & Bausi (2010). See also "Roads" in Uhlig & Bausi (2010).

^{158.} This included the first physiognomic characterisation of the altitudinal zonation of the Abyssinian landscape, not least the sometimes snow-covered Semien Mountains. Plates in Rüppell (1838-1840, Atlas) show the first representation of Afroalpine vegetation, drawn on Mt. Selki, with a sward of tufted grasses, giant *Lobelia rhyncopetalum* and shrubs of *Erica arborea*. Rüppell is the first to describe the giant roset plants that are characteristic of the Afroalpine vegetation and of high alpine vegetation elsewhere in the tropics. He also published sketches of the geological structure of the Abyssinian Highlands (Rüppell 1834, 1836).

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Collections of historical manuscripts; historical observations

Important collections of Abyssinian manuscripts were established chiefly by Bruce and Rüppell. Bruce's collection at the Bodleian Library, Oxford, represents about 30 manuscripts. Bruce also gave manuscripts to the King of France, but how many of these that are now in Bibliothèque Nationale in Paris seems not to be recorded. Rüppell's collection of manuscripts in Frankfurt represents about 25 manuscripts. Bruce's and Rüppell's collections of Abyssinian manuscripts are among the earliest in Europe. 159 Bruce wrote a complete account of the Abyssinian history from the early middle ages to his own time; an important, but somewhat unreliable work. Salt provided some corrections to Bruce's historical observations, mainly with regard to near-contemporary events, while Rüppell, in his travel account, gave a shorter, more critical account of the entire history of Abyssinia during the period covered by Bruce.

Collections of religious manuscripts; religious traditions and practices

Introduction of Christianity into Abyssinia in the fourth century AD soon lead to the translation of Biblical texts from Greek and possibly other languages into Geez. It is assumed that by the fifth century large parts of the Bible had been translated. Therefore, early biblical texts from Abyssinia were of interest for historical studies of the Bible. Bruce made a special point of collecting religious texts, significantly more so than Salt and Rüppell. The description of religious practice is limited in the writing of all three travellers, but Salt's assistant, Pearce, who lived in Tigray for many years, has provided good descriptions of how

159. It is estimated that there are now several thousand Abyssinian manuscripts in public collections outside Ethiopia (Abyssinia). The four biggest collections are the *Bibliotheca Apostolica Vaticana*, *Bibliothèque Nationale de France*, the *British Library* and the *Staatsbibliothek Preussischer Kulturbesitz, Orientalabteilung*. "Manuscripts" in Uhlig (2007).

160. Ullendorff (1968); "Bible" in Uhlig (2003).

the major holidays of the Abyssinian Orthodox Church were celebrated, as well as traditional ceremonies for baptism, weddings and funerals.¹⁶

Attitudes to people in Abyssinia; views on Christians and Muslims

The travelogues of the three travellers are almost without negative generalisations or patronising statements about the people of Abyssinia. In most cases the travellers have characterised the people they met as clever or incompetent, good or bad, depending on how they behaved. It is also striking that all three travellers wrote about people of various status in life as they presumably would have written about similarly situated people in Europe: the Abyssinian Emperor, people at his court, Abyssinian nobility, officers, traders, clergy, scholars, peasants, etc., are generally described as people with a similar social status in Europe. Robbers and thieves are also frequently referred to by all three travellers, and their behaviour and deeds are naturally feared or condemned, as they would have been in Europe. The changing attitudes to aristocracy during the period from Bruce's to Rüppell's travels are also reflected in the travelogues: Bruce was the most respectful with regard to high ranking and noble Abyssinians, but also Salt and Rüppell showed respect for people in Abyssinia of high social status or erudition. There was little difference in the attitude of the three travellers towards Muslims and Christians. As mentioned, Rüppell pointed out that people of the Muslim faith generally were raised above the Christians with regard to their moral attitudes.

Fauna and flora; collections of animals and plants

Bruce's publications and the drawings of plants made in Abyssinia by Balugani contain notes on many plant species that were described by contemporary scientists. Salt and Rüppell made no drawings of individual plants, only of vegetation or landscapes, but Salt

^{161.} Pearce (1831).

collected hundreds of herbarium specimens and 150 new scientific plant species were described on these. Rüppell also collected several hundred herbarium specimens, from which close to 100 new species were described. The work of Bruce is of relative little importance for the understanding of Abyssinian zoology. Contrary to this, Salt's collections of birds are important, and all of Rüppell's zoological collections are very important.

The successors of Bruce, Salt and Rüppell

Bruce, Salt and Rüppell covered nearly all fields of scientific travel. Later travellers gradually began the disentanglement of disciplines. The French travellers Arnauld and Antoine d'Abbadie162 at first focussed on surveying Abyssinia, but later Antoine produced linguistic studies, while Arnauld wrote colourful travelogues. The German naturalist G.H.W. Schimper spent large parts of his life in Abyssinia, focussing on collection of plants, animals and geological specimens, but invariably he became involved in Abyssinian society. 163 The last of the multidisciplinary travellers was the German geographer, botanist, linguist, Egyptologist and archaeologist Georg August Schweinfurth, who visited Abyssinia in 1863-1866 and the Italian colony of Eritrea in 1891-1894. 164 Also the political contexts changed. Europeans in Abyssinia had previously been looked upon as fellow Christians, potentially useful allies in an expanding Muslim world. This continued, but with the gradual opening of the Red Sea for European navigation in the nineteenth century rivalry began between Great Britain and France for dominance in the region. Salt advocated trade on the Red Sea and pointed to benefit of this for both British and Abyssinians:165

... I may farther observe, that if ... any one point on the

Abyssinian coast [is] taken under protection of the British flag, there is no doubt that a considerable demand would shortly arise for both English and Indian commodities, which, though not in the first instance of any great importance, might still form a valuable appendage to the trade of Mocha, ¹⁶⁶ ... The advantage of this intercourse [with Great Britain] to the Abyssinians themselves would prove incalculably beneficial; it would open to them the means of improvement, from which they have so long been debarred, ...

Neither the East India Company nor the British government took up Salt's proposal. 167 When, in 1838-1839, the British East India Company established itself at Aden, it had little connection with Abyssinia. Instead the French government established in 1883-1887 a trading post at the Red Sea, the "Territore d'Obock", which developed into "Côte française des Somalis et dependences", now Djibouti, and became a major point of Abyssinian import and export, as predicted by Salt.

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^{162. &}quot;Abbadie, Antoine d' and Arnaud d'" in Uhlig (2003); Fischer-Kattner 2012.

^{163.} Friis (2009a, 2009b); Rubenson (1976); "Schimper, Wilhelm" in Uhlig & Bausi (2010).

^{164. &}quot;Schweinfurth, Georg August" in Uhlig & Bausi (2010).165. Salt (1814), pp. 497-498.

^{166.} Mocha, Mokha or Mocca, was important for coffee export from the 16th to the 19th century, either via Jiddah and Egypt on Arabian ships or via the Indian Ocean on European ships; see Tuchscherer (2003).

^{167.} Hallett (1965), p. 394.

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Travel, Truth and Narrative in the Arabian Writings of James Wellsted (1805-1842)

Charles W. J. Withers

Abstract

The essay examines the travel writings of the British Arabian traveller and hydrographer James Wellsted, notably his Travels in Arabia (1838). Wellsted's landbased Arabian travels undertaken between 1829 and 1837 as part of coastal navigation work provided important new information on the ancient Near East, especially upon pre-Islamic epigraphy and archaeology, and first-hand perspectives on the economy and cultures of the Arabian peoples in ways which supplemented and extended the observations of Carsten Niebuhr, James Bruce and others. Wellsted's in-the-field expertise was endorsed by the presentation of his work to the Royal Geographical Society. His post-exploration authorial reputation was mediated, however, by his publisher, John Murray, who, for reasons of audience interest, published the novel findings of Wellsted's land travel as volume one of the Travels in Arabia, placing the scientific coastal work in volume two. In thus re-ordering Wellsted's narrative, Murray materially altered in print both the chronology and the purpose of Wellsted's work. In assessing the "truth" of travel narratives, we need to pay attention to the material history of the books themselves, to the nature of the shift from explorer to author and to the role of publishers in creating audience demand for travel narratives.

Introduction

"Prejudices relative to the inconvenience and dangers of travelling in Arabia, have hitherto kept the moderns in equal ignorance". Writing thus in his *Travels through Arabia*, Carsten Niebuhr made clear how he had proceeded. This was partly on the basis of what he had seen for himself, and partly from "different honest and intelligent Arabs". As Niebuhr further wrote, "This information I was most successful in obtaining among the men of letters and the merchants; persons in public offices were more entirely engrossed with their own affairs, and generally of a more reserved character".

This mode of obtaining my information appeared to carry with it several peculiar advantages; and it will be of no less utility, that I distinguish in this manner between what I observed myself, and what I was informed of by others. The reader will thus be enabled to discern between what I mention barely upon the authority of my own observation, and what I relate upon the concurrent evidence of many of the most enlightened persons in the nation.^I

Niebuhr's strategy speaks both to the particularities of his Arabian travels and to more significant general

^{1.} Heron's translation and adaptation of Carsten Niebuhr, Travels through Arabia, and other countries in the East; Heron (1792), Vol. II, p. 4.

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issues in our modern understanding of travel and truth in narratives of exploration. First-hand encounter was not always possible in extensive territories or where one's direction and manner of travel was constrained. Even where first-hand observation could be relied upon, it often required the substantiating warrant of additional information from reliable sources: just as Niebuhr recognised.

Yet, in general, most people did not travel. Furthermore, they experienced the results of travelling at second hand - in print. In an important sense, knowledge of the peoples and natural phenomena encountered by explorers and travellers depends crucially upon the later accounts printed of them. Travel "in the field" might well be inconvenient, even dangerous; but the words of explorer-authors had to face further hazards upon return - the "voyage into narration" - before they could become the bases to new knowledge.2 The move into print was not straightforward. The explorer-author may well have sought exactness through writing in what he or she recounted during the act of travel. To do otherwise was to risk being exposed as incompetent, or, worse, as a travel liar or fraud. Yet it is often clear that authors' claims to what some called "plain and unvarnished truth" were founded upon other's verbal testimony in the field or upon only fleeting observation of the phenomena and place in question - and thus upon only limited first-hand authoritative experience: exactly Niebuhr's situation. Upon their return, explorer's words were often modified as notebook jottings and as en route writing moved into print.3

Given these issues about authorship, authority, and authoritativeness, truth telling in exploration writing was far from plain and seldom unvarnished. The implication for scholars engaged in critical exegesis of travel accounts as historical sources is two-fold: attention needs to be paid to the evolution of the author, not just to the facts of the exploration, and the making of the author and of the book as a printed ar-

tefact may be seen as a matter of material hermeneutics, both brought into being by others such as publishers.

The processes by which "the explorer in the field was translated into the published author"4 could furthermore involve that more direct translation, from one language to another, as well as the epistemological sense embraced by the notion of the "voyage into narration." Niebuhr's Travels are again illustrative and suggestive. The English language translation, in 1792, was by the Scottish topographical writer and geographical "hack", Robert Heron. Heron was the "author" amongst other works of A New and Complete System of Universal Geography in 1796. As he admitted, however, this book (like many such at the time) was a synthesis of others' works "freely and largely borrowed from prior and contemporary writers; but without committing any depredations on the literary depredations of others".5 In his translation of Niebuhr's work, Heron certainly did commit literary depredations upon the original text. "It would be unfair to neglect advertising [to] the reader" [Heron tells us], "that the whole of Mr Niebuhr's account of his travels, and observations in Arabia, is not comprised in these volumes. Various things seemed to be addressed so exclusively to men of erudition, that they could not be expected to win the attention of the public in general, and have therefore been left out."6 For English language readers, just those things that had motivated Niebuhr and his Danish patrons and which so engaged his Enlightenment readers were omitted from the volume in question: questions of audience outweighed those of authoritative completeness.

This chapter examines these issues of authority, authoritativeness, of author-making and the production of travel-based knowledge with reference to the work of the British Arabian traveller James Raymond Wellsted (1805–1842). Wellsted published two books, *Travels in Arabia*, in two volumes in 1838, and *Travels to the*

^{2.} Bourguet (1997), p. 296.

On these issues, see the work of Ian Maclaren cited in the references below.

^{4.} Driver (2001), p. 8.

^{5.} Heron (1796), Vol. I, p. v.

^{6.} Heron's adaptation of Niebuhr (Heron 1792, vol. I, p. xii).

City of the Caliphs in 1840, also in two volumes.⁷ Both works, his 1838 Travels in Arabia the more so, were in large part based upon work undertaken between 1829 and 1837 and upon papers presented to the Royal Geographical Society in 1835 and in 1836 (work for which Wellsted was made a fellow of the Royal Society in 1837). The survival of some of Wellsted's original papers mean we can assess changes between written versions of his work and discern relationships between what was presented as a spoken and, later, as a published geographical paper, and his printed books.⁸

Although not wholly overlooked, Wellsted has been unjustly neglected by modern scholars. His peers regarded his work highly. In closing his 1816 biography of Carsten Niebuhr, his son Barthold noted: "To this day no traveller returns from the East without admiration and gratitude for this teacher and guide, the most distinguished of oriental travellers. None of those who hitherto have followed him, can be compared with him; and we may well inquire, whether he will ever find a successor who will complete the De-

7. The full title of the work (Wellsted 1840), undertaken in the field and in authorship with Lieutenant Ormsby, is *Travels to the City of the Caliphs, Along the Shores of the Persian Gulf and the Mediterranean: Including a Voyage to the Coast of Arabia, and a Tour On the island of Socotra*. Two volumes. (London: Colburn, 1840). Neither Wellsted nor Murray has left us with evidence which might account for his changing to Colburn from Murray between his 1838 and 1840 books: it is possible that Wellsted's frailty of mind after 1837 – see text and foot note 35 – was one reason for Murray to be cautious with respect to Wellsted's capacities.

8. Of the ten separate holdings of Wellsted's papers in the archives of the Royal Geographical Society, the following are the most relevant in this respect: MS JMS/9/16 [Wellsted's paper 'On the Ruins of Nukub ul Hajar'] [sic]; CB2/574, correspondence confirming Wellsted's work as unearthing Hammurabic epigraphy; JMS/9/17, an unpublished 12-page manuscript entitled "Geographical Notice of the Southern Coast of Arabia" [which was read before the RGS on 23 January 1837, before Wellsted's final field season in Oman]; and JMS/9/5, also unpublished, which contains brief notes by Wellsted on the accuracy of James Bruce's longitudinal positions of several settlements in the region. This manuscript is dated 19 May, 1835.

Scription of Arabia and be named along with him?"9 James Wellsted's Arabian travels compare well with Niebuhr's. There is the same attention to detailed description and empathy for the Arabic peoples. One contemporary review of Wellsted's work even lauds him in comparable tones.¹⁰ Wellsted knew Niebuhr's work well. He cited from it in his own descriptions of places, in commenting upon unknown epigraphy, in collecting botanical specimens, in adjusting or confirming the location of places through longitudinal measurement and in recording his views of the region's peoples and their customs.¹¹ There is a strong geographical and authorial affiliation between Niebuhr and Wellsted, even what we might think of as a

10. One anonymous reviewer noted thus of Wellsted's Travels in Arabia: "His book not only contains discoveries and traces new ground, but that ground, as well as the field of his travels which had previously been examined and described, has obtained at his hands such correct, elaborate and ample delineation as will unquestionably secure for him permanent fame. Indeed we regard him as being one of the best-equipped and successful travellers that our times can boast of. He is adventurous to the extremity of English daring, but as prudent as adventurous. He is inquisitive and patient; his knowledge of general literature, art, and science is sufficiently extensive to enable him to treat of the various points which in his progress fell within the compass of each of these departments, in a manner which persons of cultivated minds and considerable acquirements will exactly understand from his simple description; his eye is quick, vigilant, and excursive; while his style of writing is clear, frequently luminous, cheerful, spirited, and possessed of a becoming dignity. Altogether, the reality and force, as well as the variety of his pictures, render Mr. Wellsted's work one of the most agreeable and satisfactory that we have ever read". [Anon.], Monthly Review, 2 (February 1838), p. 255-6.

II. Contemporaries were less praiseworthy of Wellsted's plant collecting and botanical skills than they were of those of Niebuhr and Forsskål. This is clear from a brief summary of Wellsted's botanical collections which notes "The collection does much credit to the industry and scientific devotion of this officer; but, as might be expected from the nature of the country explored, possesses little of novelty or importance. It is chiefly interesting as connecting the vegetation of Sinai and Egypt with that of Arabia Felix". [John Lindley], "Notes on a Collection of Plants Sent" (1835), 296.

^{9.} Niebuhr (1836), p. 68.

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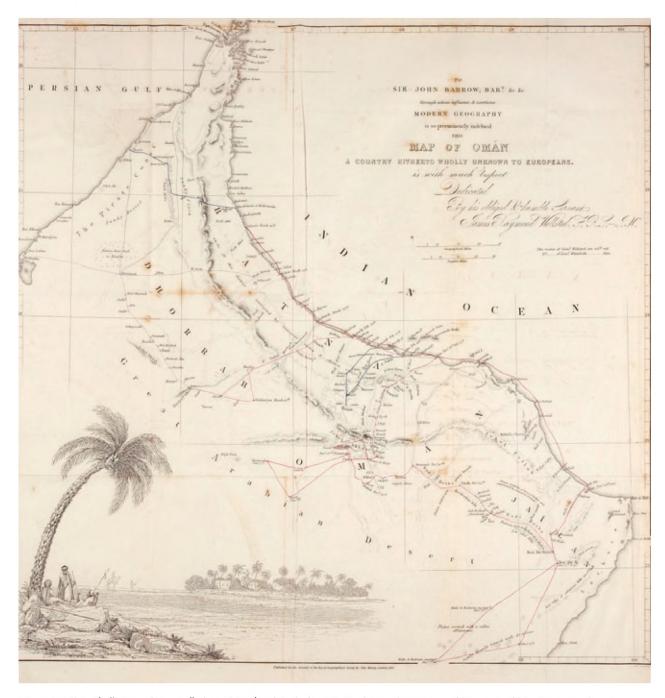


Fig. 1. Wellsted's "Map of Oman", from his *Travels in Arabia* (1838) shows the routes of his part of his Oman and east Yemen inland travels and of part of his coastal navigation work in that region. His description of the region as being "hitherto wholly unknown to Europeans" was intended to enhance the significance of his own work rather than diminish that of Niebuhr and others, and, since Wellsted was a naval officer (albeit in the Indian Navy or East India Marine), it was probably aimed at Sir John Barrow, Second Secretary to the Admiralty and a key supporter of geographical exploration at this time (to whom the map is dedicated). Source: James Wellsted, *Travels in Arabia* (London: John Murray, 1838), I, facing page i. Reproduced with permission of the Trustees of the National Library of Scotland.

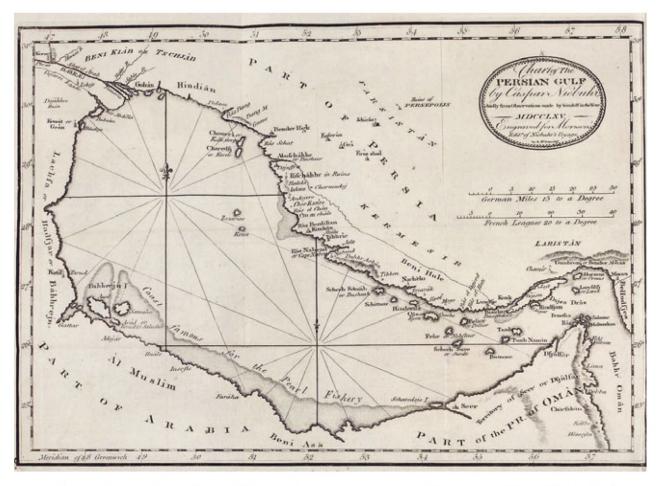


Fig. 2. Niebuhr's "Chart of the Persian Gulf" from Robert Heron's 1792 English-language translation of Niebuhr's Arabia travel account. The area explored in Wellsted's travels (Figure 1) is largely within that part of Oman shown in the bottom right hand corner of this map. Note that Heron even gets Niebuhr's Christian name wrong in his translation, giving it here as "Caspar" (in the title to the map image). Source: Robert Heron [translator], *Travels Through Arabia, and Other Countries in the East. Two volumes. (Edinburgh: Printed for R. Morison and Son Perth; G. Mudie Edinburgh; and T. Vernor, Birchin Lane, London, 1792), II, facing page 121. Reproduced with permission of the Trustees of the National Library of Scotland.

"citationary geography" in the sense that Wellsted drew upon Niebuhr's work as a source of reference and in order to correct it (he did so of several others, notably Jacob Burckhardt and James Bruce). 12 Wellst-

12. The idea of "citationary geography" is taken from Mayhew (2005). By its use, Mayhew means that by examining who was cited as a source for given claims, and how, we may identify not just the scholarly communities of which travel writers and geographical authors were part, but also determine shifts away, for example, from textual accounts based on Classical authority towards evidence derived from first-hand empirical

ed made a point of emphasising, in part in his map work, that he was extending Niebuhr's work. See Fig. 1 and Fig. 2.

I do not want to claim that Wellsted was following in Niebuhr's footsteps, either literally or figuratively (nor those of Bruce or Burckhardt). I do want to explore Wellsted's work in order to illustrate its impor-

encounter. On Wellsted's corrections of the chart and map work of James Bruce, see "Notes on Bruce's Chart" (Wellsted 1835b).

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tance for an understanding of Arabia, particularly Yemen and Oman, in the wake of Niebuhr. But as significantly perhaps, what follows also suggests that in studying Wellsted we can illustrate that wider problem in the material study of travel narratives, namely the relationship between published account, audience and publisher and how the relationship between the explorer in the field and the facts of travel could become less important than that between publisher and audience. In the field, Wellsted's making as an explorer depended upon first-hand empirical enquiry, observational accuracy and, to varying degrees, the guidance of others. In London, before and after his Arabian travels, Wellsted's making as an author depended upon a network of scientific authorities and a publisher, John Murray, whose trust in Wellsted's Arabian authoritativeness was allied with his own concerns - as Heron's had been for Niebuhr - about audience. My related concerns in this paper are, then, to explore the nature of Wellsted's travels in Arabia and the nature of his book's making in London: conjointly, to consider the construction of an exploratory narrative, a reputational geography and of a literary artefact.

Wellsted's Arabian travels: exploration and authorship in the field

Wellsted's Arabian land travels were part of the hydrographical survey by the Indian Navy of the Gulf of 'Aqabah and the Gulf of Oman being undertaken with a view to charting those waters and identifying opportunities to extend British interests in the region (matters associated with a possible steam navigation trade route from Europe to India that would avoid travel around the Cape of Good Hope). During its work, the survey encountered pirate activity: it may be that stemming such activity was one of its aims in view. Survey work was a means to make both coasts and piracy visible: "So long as these remained unknown to us" [wrote Wellsted], "a feeling of imaginary or real security would induce them to follow their former practices; but the circumstance of Eng-

As his ship the *Palinurus* navigated the coasts, Wellsted and companions were landed for days and sometimes weeks at a time to undertake examination of the hinterland, partly with an eye to the contemporary economic utility of the Arabian interior, partly with a view to its antiquities, ethnography and natural history. Wellsted travelled in Sinai, a region then known to European commentators, and to Oman and Yemen, hitherto little known, and to the island of Socotra. Wellsted's warrant to safe passage took the form of letters, part of whose contents noted that "all those who are desirous of maintaining the friendship of the British Government are requested to show him every attention and civility". 15 As Wellsted recounts, several of those persons with whom he was in contact knew little and cared less about Britain's friendship but they showed him attention and civility nonetheless. "Whenever the officers of the Palinurus landed, they were permitted to roam about the town" [Wellsted is here referring to the Red Sea port of Yembo] "without being made sensible, either by importunities or questions, that this liberty was granted as an indulgence, or that their steps were being watched. ... The pigs we had on board excited more attention and curiosity than the ship, though no European vessel had visited their port for many years before."16

Wellsted's movement from sea to land to sea permitted a sort of "repeat circuitry" as he moved inland, "writing down the coast" to paraphrase his own words, before rejoining his ship once more (see Figure

14. Wellsted (1838), Vol. I, p. 253.

lish ships "writing down their coast", to use their own descriptive expression, was alone enough to give them an idea that we should possess a perfect knowledge of it". As Wellsted further observed, "The result has hitherto justified the anticipation, for the survey was no sooner completed, and a strict system of surveillance established, than their appliances and resources became, as a measure of necessity, turned from piratical to commercial pursuits". ¹⁴

^{15.} Wellsted (1838),

^{15.} Wellsted (1838), Vol. I, p. 3.

^{16. &}quot;Observations on the Coast of Arabia", Wellsted (1836a), p. 72.

^{13.} Kelly (1968), pp. 371-374; Low (1877), Vol. II, pp. 85-87.

1). For the modern researcher, what we are afforded is less a linear narrative than a sequence of moments of contact, partly instances of incommensurability as Wellsted got his bearings, literally and figuratively, before beginning inland travel, and partly a record of site-based study and commentary. There is not the space here to analyse all of what he narrates. The main themes were ancient history and geography, wherein Wellsted was concerned with monuments and inscriptions (he even undertook some archaeological excavations to this end); topography and political economy; natural history; and ethnographic observations. In this last context, Wellsted's repeated movement throughout the region afforded opportunity for him to be quizzed by the inhabitants: his is by no means a European commentary of an a priori moral and political superiority.

Contemporary interest in the region's archaeological remains centred upon what evidence there was in the present for sites with Biblical significance, and in epigraphy. Much of the ancient geography was unknown to Europeans. It appears to have been far from understood by the indigenous inhabitants. As Wellsted noted at one point: "During the progress of the survey of the south coast of Arabia, ... the Bedowins brought us intelligence that some extensive ruins, which they describe as being erected by infidels, and of great antiquity, were to be found at some distance from the coast."¹⁷ To Wellsted's frustration, his native guides refused to proceed to inscriptions nearby which were already known about, but were happy enough to escort him to a further set of ruins. Hindered by the Bedouin as to what he might be shown, Wellsted's observational capacities were at moments restricted: "they watched our movements so closely, that I found it, for a time, impossible to take either notes or sketches."18 His excitement, then, at reaching the ruins at Nakab al Hajar [now Niqqab-al-Najar in southern Yemen], at being allowed access to the ruins and finding there hitherto unknown inscriptions is palpable:

The ruins of Nakab al Hajar, considered by themselves, present nothing therefore than a mass of ruins surrounded by a wall; but the magnitude of the stones with which this is built, the unity of conception and execution, exhibited in the style and mode of placing them together, – with its towers, and its great extent, would stamp it as a work of considerable labour in any other part of the world. But in Arabia, where, as far as is known, architectural remains are of rare occurrence, its appearance excites the liveliest interest.

Wellsted was also perceptive in noting that "The inscription which it has been our good fortune to discover, will, there is every reason to believe, create considerable interest among the learned". 19

Wellsted's remarks about this site, its size and grandeur and its inscriptions are amongst the first to disclose an even more ancient history to Arabia. Wellsted was a perceptive commentator generally, upon both the facts of material remains and in their interpretation and significance to an understanding of "modern", that is, contemporary to him, Arabia. This region and the "antique lands" of the Middle East as a whole was read by many contemporaries as "backward", either from associations with oriental despotism or from the lack of any recognisable political system at all.20 Yet Arabia fascinated precisely because of these relics of an even more ancient and distinguished past, a past which, of course, threatened to place European civilisation in an inferior position. This was contemporary geographical encounter and archaeological exploration as time travel.

Not that he quite knew it then, what Wellsted was unearthing at Nakab al Hajar and elsewhere was crucial new evidence concerning the Himyarí people as termed by modern Arabs, the Homēritæ of Ptolemy, also known as the Hammurabic peoples. These interests were to crystallise in work on the pre-Islamic ar-

^{17.} Wellsted (1837), p. 20.

^{18.} Wellsted (1837), p. 23.

^{19.} Wellsted (1837), pp. 30, 31. There is no difference, apart from a brief and perhaps to-be-expected expansion of parts of the narrative concerning the nature of his travel (rather than the facts and the excitement of the findings), between Wellsted's words in this printed published account and his manuscript account of it in JMS/9/16 (see footnote 8 above). 20. Leask (2002).

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chaeology of the Arabian and Yemeni peninsula and the region's comparative philological and religious history.21 In his work on the ruins of Berenice [what is today Medinet-el Haras on Egypt's Red Sea coast], Wellsted helped confirm the site as that of Berenice Troglodytica, one of the most prosperous cities of the ancient world and a key trade link between India and Egypt.22 In a further sense, Wellsted's work may thus be historiographically placed between those late Enlightenment questions of Biblical exegetics which motivated Carsten Niebuhr and his patrons, and that work in the Holy Land from the 1840s onwards of British, German and American scriptural geographers which was distinguished by its combination of archaeological excavation, Biblical analysis, comparative philology and epigraphy and landscape study.²³ In his lengthy work on Socotra by contrast, Wellsted could find no "ancient vestiges or monuments" by which to prove the island peopled "by a race further advanced than the present."24 That island was read in terms of its contemporary economic importance and for its natural history rather than as a laboratory of historical difference.

Wellsted's interests in contemporary agriculture, commerce and political economy were also informed by his interpretation of ancient remains in the landscape and what they might signify. He read the present for what it contained of the past, and the past for

21. See, for example, Forster (1844). In his *Travels in Arabia*, Wellsted later commented (initially this had been in one of verbal presentations to the Royal Geographical Society) about the gathering evidence concerning epigraphy and the significance of its comparative assessment: "But there is yet one more important fact connected with this subject, which has very recently come to my notice, and to which I beg to solicit the attention of the Society – that since my discovery of the inscriptions of Nukub-el-Hedjer [sic], others have also been discovered in Egypt, in India, and in America; the latter affords abundant matter for speculation": Wellsted (1838), Vol. II, p. 39.

what comparative light it threw on present-day human cultures. On being shown the ruins of one settlement in a "luxuriant though uncultivated tract", the evidence for his judgment of it as "not of Arabic origin" stemmed simply from the presence of an associated aqueduct which, he averred, had clearly been built "at the cost of more trouble and labour than in all probability the Bedouins, under any circumstances, would have bestowed on such an undertaking."25 What Wellsted considered the "usual apathy and indifference to agricultural pursuits common to the Bedouins"26 was sufficient basis for him to argue thus. But of the then fertile and populated region of central Oman he wrote in a mixture of astonishment and admiration at the civic and hydraulic engineering that had been put in place to allow agriculture: "nearly all the towns in the interior of Oman, owe their fertility to the happy manner in which the inhabitants have availed themselves of a mode of conducting water to them, a mode, as far as I know, peculiar to this country, and at expense of labour and skill more Chinese than Arabian."27

Wellsted's narrative tone is not overly moralistic or judgmental. He more than once writes about his preparedness to sacrifice European comforts in travelling, in meeting Arabs and Bedouins on their terms. On several occasions he was the object of interrogation. These enquiries partly concerned his immediate circumstances and exploratory intentions, regarding, for example, the refusal by some natives to permit Wellsted to investigate past ruins and observe epigraphic inscriptions lest, in the interpretation of their past, contemporary cultures should be found wanting. They also partly related to Wellsted the traveller as a credible witness for his own culture - over, for instance, the perceived "great liberty" afforded European women (the fact that many were encouraged to read and write, to have gainful employment and so

^{22. &}quot;Notice on the Ruins of Berenice", Wellsted (1836b), pp. 96-100.

^{23.} Aikin (2010). Wellsted is not mentioned in Aikin's survey. 24. "Memoir on the Island of Socotra", Wellsted (1835a), p. 219.

^{25. &}quot;Observations on the Coast of Arabia", Wellsted (1836a), p. 54.

^{26. &}quot;Observations on the Coast of Arabia", Wellsted (1836a),

^{27.} Wellsted (1838), Vol. I, p. 92.

on). Wellsted the hydrographic surveyor was thus quite often under surveillance during his land travels.

Viewed from a modern perspective, Wellsted's *Travels in Arabia* and his associated publications provide important insight into the ancient geography and present history of a region of the world which although illuminated by Niebuhr nearly seventy years before remained largely unknown to most Europeans. His land travels – the secondary, terrestrial and narrative off-shoot of his primary, hydrographic and chartbased enquiries – brought him recognition and a degree of social standing as an explorer-author. As we shall see, however, Wellsted's making as a credible author involved more than his own work.

Exploration into print: the making of Wellsted's narrative

In the preface to his Travels in Arabia, Wellsted offers some brief comment on how he had proceeded, in the field and in his later authorial role. This is less a methodological disclaimer in the style of Niebuhr than insight into his narrative's making: "In the personal narrative he has endeavoured to convey to the reader the impressions produced on his mind at the moment of each particular occurrence. As to the rest, it was compiled from copious notes collected at various intervals." The merit of the work lay in its novelty: "Many of the facts herein stated have never previously been made known to a European public, and it is on this ground of novelty alone that the Author diffidently hopes his researches may prove interesting to the philosopher and the naturalist, as well as those more immediately engaged in geographical pursuits".28

For the most part, Wellsted was right to stress his work's novelty, for the reasons identified. But where the merit of the work lay in Wellsted's innovative field enquiries (its actual novel content concerning ancient geography and contemporary economy), the making of the book as a literary artefact as the very thing which the public would use *ex post facto* to test his mettle as an explorer was dependent upon other

people, and upon Wellsted's work elsewhere. It was in part dependent upon Welsted's personal and spoken performance in presentation of his work to the Royal Geographical Society. It was in part also dependent upon that network of men of status and patronage upon whom he had to draw in order to become "authorised" as a credible writer by virtue of his association with them and not simply because he was an able explorer as attested to by spoken word and presence in the field. These men were his commanding officer Captain Moresby, the Rev. John Reynolds for translation of manuscripts and inscriptions found in Oman and Yemen, Sir Charles Malcolm, head of the Indian Navy and long-time member of Council of the Royal Geographical Society whom Wellsted acknowledges for "his enthusiastic zeal for the promotion of geographical science", and, not least, Sir John Barrow, Second Secretary to the Admiralty, to whom the map of Oman engraved by John Arrowsmith, is dedicated (see Figure 1).29 Barrow was certainly present at Wellsted's spoken performances in the RGS. But the final shaping of the narrative, and the final making of Wellsted as author, owed most to his publisher, John Murray, whose imprint included numerous accounts of geographical exploration and travel in this period.30

Writing to Murray in February 1837, Wellsted remarked "I feel flattered that a person so competent to judge as Mr Murray should think favourably of my M.S.". He further noted: "With respect to the form in which it should be published I must confess that I

^{29.} Wellsted (1838), Vol. I, pp. vi-vii. Barrow's work in promoting exploration and the advance of modern geography is the subject of Fleming (2001).

^{30.} John Murray was also publisher to the Royal Geographical Society at this point, producing the *Journal* for them. There is no evidence that Murray was more supportive of Wellsted than he might otherwise have been given this connection but it is possible that Murray was present at the spoken presentations by Wellsted within the Royal Geographical Society and that, upon hearing him, as well as knowing the network of men to whom Wellsted was making reference, Murray resolved to publish the work after coming to a judgement about its intrinsic geographical importance.

^{28.} Wellsted (1838), Vol. I, p. v.

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would rather submit it to the judgment of others than my own - no one knows the public taste better than Mr Murray and there is no one whose opinion would be of more value". Wellsted ends his letter by expressing a hope that "but little alteration in the arrangement [of the narrative] would be required but on this subject if agreeable to Mr Murray I shall hear more from you."31 Murray's reply has unfortunately not survived. The narrative was published by Murray in 1838 with the chronology of Wellsted's Arabian travels reversed: his 1834-37 Yemen and Oman work, with its attention to comparative epigraphy and the novel facts of travel in unknown regions, was made the first of the two volumes. The more specialist coastal survey work undertaken between 1829 and 1834 and Wellsted's Arabian mapping was made the basis to the second volume.32 Wellsted clearly wrote in the field and amended his Arabian travels on the basis of London-based presentations and his own authorial purposes; Murray re-fashioned the order and relationship of Wellsted's travel facts in order to suit perceived audience demands.

31. National Library of Scotland, MS 41258, James Raymond Wellsted to John Murray [John Murray II], 28 February 1837. In this letter, Wellsted also notes "The only person who has seen the M.S. which I sent to you [Murray] is Mr Frere in Malta who went over it & has added as you may have observed some notes – his opinion would induce me to hope but little alteration in the arrangement of that would be required but on this subject if agreeable to Mr Murray I shall hear more from you". It is possible that this was Bartle Frere, later connected with the RGS and from 1834 colonial governor in Sind in India (in which context given his Indian Navy connections Wellsted may have met Frere, but this cannot be confirmed). In the absence of Wellsted's original manuscript, the nature of Frere's additional material (if indeed it is his) cannot be known.

32. It is possible, of course, although unlikely that this was Wellsted's intention rather than Murray's. Even if this were so, final sanction of the form of exploration narratives remained with Murray as publisher rather than with the author, so the reversal of chronology with a view to putting what was novel as the first volume must have received Murray's approval, and in all probability was made by him. For a similar example involving Murray as publisher and exploration narratives, see Withers and Keighren (2011), pp. 560–573.

This decision to re-order Wellsted's Arabian narrative was commented upon by reviewers:

In Arabia, the place of honour is always given to age not so in Albemarle Street or the Row. Among us, the great Sheikhs of publication, who recline voluptuously beneath their shady groves, while their literary herds browse in the desert, invariably give the preference to what is new; and, regardless of the sense, turn topsyturvy whatever MSS, are placed in their hands, solely for the purpose of placing in the front whatever strikes the eye most with the glistening of novelty. To the influence of such guides we ascribe it, that while Mr. Wellsted's first volume commences with a journey made in 1835, the second falls back to 1829. This disregard of chronological order releases us from the obligation of following very scrupulously in our author's track: we feel ourselves quite at liberty to pass from his second volume to his first, and back again at our own discretion, so as to be able to give a connected view of these researches and excursions which are best viewed in conjunction, and which, embodied in such a manner as to exhibit their general results, are most likely to prove interesting and profitable to our readers.33

The reader's experience of travel and Arabian encounters, and the publisher's as to what was significant and "novel", could be very different from the author's. Because this is so, we need to be attentive – as Wellsted's case well illustrates as also does the Niebuhr-Heron relationship in translation – to the "after life" of travel facts, to their publication history and to the relationships between publishers and authors and "translators" not just to the author's experiences in the field.

33. [Anon.], The Athenœum, 13 January 1838, pp. 29–30. The reviewer in the Quarterly review likewise indicated to his readers that "it will be expedient to reverse the arrangement of the author, by commencing with the second volume, – that being first in the order of time". [Anon.], Quarterly Review 61 (1838), p. 301. The reference here to 'Albemarle Street or the Row' is, respectively, to the location in London of John Murray's business offices where he met with his authors and booksellers, and to Savile Row, the then address of the Royal Geographical Society.

Conclusion: Wellsted, Arabian exploration and book history

Discussing the path from exploration to publication of George Back's polar narratives in the 1830s, Maclaren notes that "It is in the nature of this line of enquiry . . . that the findings of one book or of one explorer are not necessarily pertinent to any other case". He further remarks: "Nor should the availability of publishers' correspondence with authors necessarily serve to undermine the status of the published text itself." His cautionary remarks are well taken, and they may be supplemented from this particular instance.

Wellsted's books and papers on Arabian exploration did not straightforwardly disclose the facts of travel upon which they were based. Wellsted amended his own notes to suit the purposes intended. Murray altered the order of their undertaking to highlight the importance of the novel facts encountered by Wellsted. Nor was Wellsted the explorer-author always of sound mind. In Oman in April 1837, in a delirium brought on by fever, Wellsted put his pistols in his mouth - but succeeded only in leaving himself with ghastly wounds to his upper jaw. Invalided back to Bombay, thence to London, he lived for a further five years in France and in Kent, his health and mind much impaired. As he wrote to Murray in March 1839, "Little I care about dying and all who know me will attest with what nerve I have faced misfortune and danger".35 Here is further testament to the dangers of travel, injury stemming either from illness or madness, such things (even if only temporary) being prompted by the climate, the diet or the sensory bedazzlement that came with encountering the new.³⁶

Wellsted's important insightful land-based Arabian travels were an ancillary consequence of hydrographic and navigational work. Yet his narrative Travels in Arabia confined itself to "remarks on the nature and general features of the country, and information connected with the inhabitants, which my several journeys have enabled me to obtain": much of the maritime material including "proceedings or incidents connected with our progress from station to station" was omitted.³⁷ In one sense, this is to observe nothing more than Wellsted's authorial competencies and his later authoritativeness did not correspond with his in-the-field experiences: he left things out; his writing was based on recall and on "copious notes" collected over time. And Murray re-arranged such facts as were assembled. In another sense, this is to highlight a more general difference common to all travel narratives and global encounters: between the explorer-author at work in the field with a view to establishing his empirical credentials with an expectation of novelty and utility for the work, and the author-explorer being scrutinised elsewhere, his words being made to serve the quite different purposes of readability and audience interest.

The status of the published text, for Wellsted or anyone else, is in no way diminished by our knowing that it is partial, redacted by the author and re-ordered by the publisher. For Wellsted the explorer, the encounters that mattered were actual, novel, intrinsically interesting and took place in Arabia. But these facts had to travel and to be epistemically "translated" into prose. In part, the process of translation was Wellsted's and involved his retrospective recall and redaction of those "impressions produced on his mind at the mo-

^{34.} Maclaren (1994), pp. 51-52.

^{35.} National Library of Scotland, MS 41258, Wellsted to Murray, 13 March 1839. In an earlier letter [6 March 1839], Wellsted had written to Murray to inform him "It gives me pleasure to inform you that the tone of my mind is entirely restored". In a further but undated letter of March 1839, he wrote to Murray noting how "I want something to do, it would kill me now I am well to be idle and it is not the steady application to one thing which does me harm but dividing my attention as I did before I left Tawee [?] into twenty different channels and following up all with an eagerness that left me scarcely time to eat, drink or sleep": National Library of Scotland, MS 41258, Wellsted to Murray, undated [March 1839].

^{36.} On this point, see Fabian (2000); and, for her discussion of Alexander von Humboldt's temporary madness (as he described it to his brother) in encountering the diversity of Amazonia, see Outram (1999), pp. 281-294.
37. Wellsted (1838), Vol. II, p. 4.

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ment of each particular occurrence." In part also, the production of author and text took place in the performance and speech spaces of the Royal Geographical Society in London. For Murray, however, the encounters that mattered were not directly Wellsted's actual travels. What mattered to him was the prospective reception of the novel facts, the encounters which would take place in silent reading in drawing rooms and the approbation or not of public review. For modern researchers into questions of travel, exploratory culture and narrative practice, the example of Wellsted's Arabian travels is a further reminder about the need to know how partial explorer's texts are, and in what ways the hermeneutic gap between exploratory intent and textual realisation - between author's experiences and audiences' expectations - was manifest.

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Location of archival material

The manuscript material drawn upon and cited in this article is housed in the National Library of Scotland, Edinburgh and in the archives of the Royal Geographical Society, London.

The Romance of Hawaii in William Ellis's "Narrative of a Tour Through Hawaii, or, Owhyhee"

Harry Liebersohn

Abstract

The history of Hawaii offers a stark contrast between traditional Hawaiian culture and the puritanism of the American missionaries who arrived in 1820. However, the long-term relationship turned into one of interaction between these opposites and, to some degree, accommodation. This paper examines an early text documenting their complex relationship: William Ellis's Narrative of a Tour Through Hawaii, or, Owhyhee (1826). It focuses on Ellis's description of three hula performances. Even though other missionaries were inclined to regard the hula as a particularly pernicious Hawaiian practice, Ellis gave detailed and sympathetic descriptions of it. A pattern of performance and counter-performance emerges from his narrative, with the missionaries preaching and hymn-singing in response to Hawaiians' hula performances and praise for their gods and leaders. The paper considers the political, personal and cultural contexts for Ellis's dialogical response to Hawaiian culture, emphasizing its affinity to literary Romanticism; it also reflects on the larger significance of this kind of ambivalent missionary response to an indigenous culture.

Introduction: The Unlikely Synthesis of Native Hawaiian and American Missionary Cultures

A recent recording, *Nā Mele Hawai'i* sung by the Rose Ensemble in Saint Paul, Minnesota, is a poignantly beautiful introduction to traditional Hawaiian music: with the help of expert ethnomusicologists, this ensemble has compiled twenty songs, hymns, and chants that introduce us to some of the chief composers and styles, most of them in this album from the late nineteenth century. The kinds of songs represented here have become a precious legacy, the inspiration for what is called Hawaiian music in the twenty-first century, especially as practiced by those who want to further a Hawaiian culture with a historical conscious-

ness of what makes the music distinctive. But just what is this music that we call traditional Hawaiian? The very first number, "Ku'u Pua i Paoakalani" (1895), was composed by Queen Lili'uokalani (1838-1917), the last monarch of the Hawaiian kingdom before the coup d'état that installed Sanford B. Dole in 1893. As soon as one listens to the music, the inflection comes through of a melody that is not native Hawaiian, but descends from the Protestant hymns brought by American missionaries brought with them to the islands beginning in 1820. At the same time, however, it is a love poem in the distinctive imagist style of native Hawaiian verse. It begins by invoking the flowers of Paoakalani, the Waikiki estate of the queen, and passes from the perfumed breeze across the field to the name of the beloved: a discreet synthesis of the erotic and the flowers of the field. Like the music, the text synthesizes native and settler cultures:

^{1.} Rose Ensemble (2007).

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E ka gentle breeze e waft mai nei - "O ye gentle breeze that wafts to me," in the queen's own translation.2 Here is the mix we wish to analyze: the music that is missionary and native, the aristocrat who is descended from the Hawaiian gods but moves fluently back and forth between traditional and modern world. How did we get here in the few generations from the arrival of Captain Cook in 1778? That is what we shall explore by going back to those formidable agents of Christianity and European civilization, the missionaries. Despite their ambition to spiritually conquer and uproot the native culture, from the beginning a complicated pattern arose of allegiance to the conquerors' culture but ongoing loyalty to Hawaiian artistic traditions. Native chant and dance enjoyed a resurgence at the end of the nineteenth century and have again been brought to life by musicians and dancers in our own time.

The Missionary War on Native Hawaiian Culture

In general, puritan missions to North America and the Pacific do not look like promising territory for evidence of métissage between cultures. The Massachusetts Bay Colony founders were notoriously frightened by and intolerant of Indian religious practices. Whether in sermons or in captivity narratives, they denounced native religious as the devil's work which it was their duty to extirpate; there was no sign here of the kind of sympathy or respect that one finds in Roger Williams, whom they drove out into the wilderness of what became Rhode Island, or that brotherly love urged on his brethren by the Quaker William Penn. The early Protestant missions to Oceania, which were also in the hands of puritanical denominations in the late eighteenth and early nineteenth century, were for the most part equally zealous and intolerant. The early London Missionary Society (LMS) missionaries were lower-middle-class "godly mechanics" who, as C. W. Newbury has made clear, had disastrously little capacity to understand the alien cultures they were

thrown into.³ The same is true for the first missionaries to Hawaii. The American Board of Commissioners of Foreign Missions (ABCFM) was formed in New England with ambitions similar to those of the LMS in England. The founders believed that a great new territory for missionary activity had opened up in the Pacific and that they could further the end of days by working there. The Americans were better educated and could benefit from the experiences of their British contemporaries; for one thing, this time they had the sense to marry off missionaries instead of sending them out in a state of intolerable celibacy. But education and marriage did not make them any less narrowly zealous; on the contrary, they were as doctrinaire as the original Massachusetts Bay puritans.

To heighten their self-confidence, the first ABCFM missionaries had luck or, as they would have called it, divine providence on their side. Although they did not know it before their arrival in 1820, a religious revolution had taken place in the Sandwich Kingdom.4 Kamehameha I, the founder of the unified monarchy, had modernized the island's army and economy, but he stuck to its religious traditions, perhaps because the Hawaiian social hierarchy was inseparable from its heiaus or temples, its priests, and its sacred calendar, all of which reinforced the exalted status of the ali'i, who were demigods descended from the gods. After Kamehameha's death, however, his son Liholiho (Kamehameha II) began to unravel the religious system by eating in the presence of women, a violation of the kapu system separating sacred and profane. The missionaries arrived just in time to offer a new god for worship; and they understood from the beginning that their best chance for success was to win the ali'i to their side. Marshall Sahlins has written a detailed portrait of the economic crisis of the islands in the early 1820s as European and American merchants stripped them of sandalwood for trade with China and the ali'i catastrophically indebted themselves to the merchants in their accumulation of luxuries that could reflect their social and religious splen-

^{2.} Ibid. (booklet accompanying record), p. 10.

^{3.} Newbury (1980), chaps. 1-2. See also Sivasundaram (2005).

^{4.} Kuykendall (1938) p. 102.

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dour. The Hawaiians were also demoralized by a demographic catastrophe, the introduction of venereal and other epidemic diseases that had reduced the islanders to a fraction of their former number.

In his account of his twenty-one years in the Sandwich Islands, Hiram Bingham, one of the most prominent missionaries, assaulted native Hawaiian culture as a kingdom of darkness that he and his fellow missionaries were determined to bring into the light. Bingham's wrapped his description of the hula in condemnation.5 Beginning his account of the mission's second year (1821), he wrote: "While some of the people who sat in darkness were beginning to turn their eyes to the light, and were disposed to attend our schools and public lectures, others, with greater enthusiasm, were wasting their time in learning, practising, or witnessing the hula, or heathen song and dance."6 Bingham was especially annoyed that the dances were performed in Honolulu in honour of Liholiho at a moment when he was expected to arrive there from Kailua (today Kailua-Kona on the island of Hawai'i). The preparations for Liholiho's arrival revealed the helplessness of the missionaries: "Notwithstanding the self-indulgent and overbearing course of their monarch, the show of loyalty, feigned or real, was very general."7 It disturbed the peace, it distracted the students: "For many weeks in succession, the first sound that fell on the ear in the morning was the loud beating of the drum, summoning the dancers to assemble. Some of our pupils were required to attend and perform their part. Day after day, several hours in the day, the noisy hula - drumming, singing, and dancing in the open air, constituted the great attraction or annoyance."8 Bingham was a close observer and gave a detailed account of the dancers' swaying and the rhythm of wooden rods and calabashes, but he could not hear the music in it: "Melody and harmony are scarcely known to them,

with all their skill and art." His final judgment: "The whole arrangement and process of their old *hulas* were designed to promote lasciviousness, and of course the practice of them could not flourish in modest communities. They had been interwoven too with their superstitions, and made subservient to the honour of their gods, and their rulers, either living or departed and deified." Bingham was incorrect to see in the *hula* performances, which were compendia of myth and history, primarily an erotic spectacle, but was right to link them to the entire social and religious system of ancient Hawaii, which he was determined to extirpate.

William Ellis's Ambivalent Hawaiian Narrative

So far the relationship between missionary and native world-views sounds like a clash of civilizations scripted by one of today's prophets of irreconcilable differences between religious systems. But this would be an incomplete understanding of the relationship between traditional culture and Protestantism on Hawaii. At least one prominent missionary, William Ellis, points in the direction of a different vocabulary of surprise, bafflement, confusion, and even admiration." It would not be correct to say that he gave up his puritanical convictions or hoped for something less than an end to traditional religious practices. Still, his text points to the ongoing power of traditional culture despite the impact of Western invasion on many levels, including religion. It is worth recalling that for much of the nineteenth century Westerners were convinced that indigenous peoples were doomed to biological extinction, one of the era's many forms of "progress."12 Just as this prediction did not come true, so traditional societies could have far greater cultural resilience than it may have appeared at first sight. The text in which Ellis bears witness to

^{5.} Bingham (1848).

^{6.} Ibid., p. 123.

^{7.} Ibid.

^{8.} Ibid.

^{9.} Ibid., p. 124.

^{10.} Ibid., pp. 124-125.

^{11.} Fig. :

^{12.} Brantlinger (2003). Cf. Liebersohn (2006), pp. 287-288.

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this greater complexity is his *Narrative of a Tour Through Hawaii*, first published in 1826.¹³

Clifford Geertz has written about a comparable set of observations for Bali in a short passage written by a Danish merchant named L. V. Helms, who according to Geertz lived in southern Bali between 1839 and 1856; Helms was torn between his sensuous attraction to Balinese culture and his revulsion toward the cruelty of suttee. Geertz speaks of the "deep equivocality" in Helms's text.14 Ellis's narrative, a book rather than a short passage, is different: there is not so much a tension as a juxtaposition of Hawaiian culture and missionary exhortation, sometimes with an open admiration for Hawaiian practices. Rod Edmond discovers a similar structure in Ellis's more famous work, Polynesian Researches, which Edmond calls an "ideal narrative of reciprocity." But that work as Edmond defines it is marked by a brusque alternation between neutral scientific description and cheerleading for what Edmond calls "Christian soldiers battling with the forces of Satan."15 I myself have recounted Ellis's polemical defence of the Tahitian mission against the contempt and complaints of upper-class captains and naturalists on the voyages of exploration that stopped from time to time at Tahiti; Ellis's controversy with them as well as the frustrations of missionary work pushed Polynesian Researches into an aggressive denunciation of traditional Polynesian culture.16 In this context Ellis's Hawaiian narrative is all the more surprising; it lacks the vehemence of the later, more systematic work. Instead the travel experience seems to swallow up Ellis's polemical vocabulary and replace it with one altogether more irenic. While the missionary remains a missionary whose ultimate goal is conversion to Christianity and extirpation of native religion, the path to the goal runs through persuasion and an actual enjoyment of his exposure to the public



Fig. 1. William Ellis (1794-1872). Engraving used as frontispiece to the 1827 edition of *Narrative of a Tour Through Hawaii*.

performances that synthesize history, entertainment, and praise of native rulers known as the *hula*. I would suggest calling Ellis's memoir an *ambivalent text*. By that I mean a text with explicit sympathies for each of the two cultures on open display. In contrast to the tension-filled texts described by Geertz and Edmond, with their sullen admission of native cultural allure and barnstorming condemnation of the servants of Satan, the ambivalent text offers a more evenly coloured panorama of native and missionary public performances.

Ellis belonged to the second generation of LMS missionaries in Tahiti. While the first generation was undereducated and unprepared for the alien cultures that awaited them, they nonetheless gradually recov-

^{13.} Ellis (1827). I have also consulted Ellis (1917). Although this is a reprint of the 1827 edition, the type has been reset and subject headings have been added.

^{14.} Geertz (1983), pp. 40-43.

^{15.} Edmond (1997), pp. 106-107.

^{16.} Liebersohn (2006), pp. 262-272.

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ered from their initial shock and built a successful mission there. Ellis himself was of the true LMS social mould: He was trained as a gardener but at age twenty joined the LMS and became a Congregational missionary. Together with his wife, he sailed in 1816 for the Society Islands (present-day French Polynesia), where he quickly distinguished himself by installing a printing press and disseminating religious literature. A gifted linguist, he began two years later to deliver sermons in Tahitian.¹⁷ Travellers frequently bragged about their mastery of Polynesian languages, but that often meant little more than grabbing at words and phrases; building on the labours of his predecessors in the mission, Ellis seems to have attained a degree of fluency that gave him a different level of communication with islanders. In 1822 Ellis went to the Hawaiian Islands for what was supposed to be a brief visit. The embattled American missionaries were so impressed that they urged him to stay, which he did, first retrieving his family and then remaining on the islands until 1825. His position as a high-ranking LMS administrator beginning in 1830 and Polynesian Researches, published in 1833, made him one of the most famous missionaries of the first half of the nineteenth century.

Polynesian Researches is a far better known work today than the Narrative of a Tour through Hawaii, and understandably so: as a general ethnography it remains a respected source of information about Tahitian, Hawaiian, and other Polynesian cultures, which Ellis, despite his missionary bias, knew intimately well. The account of his walking tour on the island of Hawai'i would seem to be a more local work with a lasting interest only for Hawaiian specialists. Any reader familiar only with Polynesian Researches would be justified in thinking of Ellis as an able polemicist who was able to convey valuable knowledge despite his ambitions for the Polynesian missions. It is startling to turn from the ideologically driven ethnography to the earlier travel account. The Narrative of a Tour through Hawaii conveys an entirely different experience of cultural exchange that took place at the time of Ellis's tour in 1823. Ellis had been with his family on the Hawaiian

First Hula Encounter: A Royal Reception on Maui

One of the most provocative institutions for missionaries in the Society Islands or Sandwich Islands was the local dance performances. We have already seen that to Hiram Bingham, the *hula* embodied erotic enticement and flattery to a monarch, judgments that left little room for actual understanding of the performances. Hula enters Ellis's narrative soon after his departure from Oahu. Three experiences of hula performances come in rapid succession near the beginning of his story. They have the effect of leading the reader across an enchanted bridge from the business and bustle of Oahu to the remote world of Hawai'i, still immersed in native arts and religious beliefs.

The first encounter on Maui moves the narrative from the civilized world of the merchants and mis-

Islands for roughly four months when he left Oahu on July 2 for the island of Hawai'i. At the time there was not yet a mission there, and the tour by Ellis and his three companions from the American mission (accompanied by a "mechanic" named Mr. Harwood) was the mission's first attempt to survey the loyalty to native religion, the attitudes towards Christianity, the receptiveness of local power holders, and the best places to establish mission stations. Ellis's account of his visit, which lasted from July 11 to September 3, with additional stops on Maui during his departure and return, is a reminder of how specific works are to their moment and their genre. Ellis was captivated by the beauty of the islands and their inhabitants; he wrote up the work from his journals and did not lose the excitement of plunging into this strange world at a time when he felt welcomed by the islanders and hopeful about their prospects for peaceful conversion to Christianity. The genre of the travel narrative did not allow him to stray too far from these experiences; while the work included many ethnographic asides, he returned again and again to his narrative of his progress from place to place on a largely happy tour of the island's hospitable villages and natural wonders.

^{17.} Etherington (2004).

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sionaries to the world of the *ali'i*. Ellis's ship anchors "within about four miles of Lahaina, which is the principal district in Maui, on account of its being the general residence of the chiefs, and the common resort of ships that touch at the island for refreshments." The landing place gives every impression of a well-ordered countryside of a kind to appeal to European visitors:

The appearance of Lahaina from the anchorage is singularly romantic and beautiful. A fine sandy beach stretches along the margin of the sea, lined for a considerable distance with houses, and adorned with shady clumps of kou trees, or waving groves of cocoa-nuts. The former is a species of cordia; the Cordia sebastina in Cook's voyages. The level land of the whole district, for about three miles, is one continued garden, laid out in beds of taro, potatoes, yams, sugar-cane, or cloth plants. The lowly cottage of the farmer is seen peeping through the leaves of the luxuriant plantain and banana tree, and in every direction white columns of smoke ascend, curling up among the wide-spreading branches of the bread-fruit tree. The sloping hills immediately behind, and the lofty mountains in the interior, clothed with verdure to their very summits, intersected by deep and dark ravines, frequently enlivened by glittering waterfalls, or divided by winding valleys, terminate the delightful prospect.19

Nature is beautiful, tame, recognizable, rewarding to its cultivators; welcoming at first sight ("romantic and beautiful") and filled with signs of industry (the beds of agricultural products) and social order ("the lowly cottage of the farmer"). If the vegetation is profuse, it is also manageable. There is a hint as well of something dangerous in those "deep and dark ravines." This smooth transition in descriptions of Pacific islands goes back to the eighteenth century; a famous picture by William Hodges originating in Cook's second world voyage, *Tahiti Revisited* (1776), conveys a tropical paradise with intimations of a strange and disconcerting world. Beyond the Pacific, Coleridge's Xanadu in the poem *Kubla Khan* (published in 1816) alternates be-

tween welcoming light and sinister darkness in its description of Kubla Khan's fantastic paradise. But these special effects only enhance Lahaina's "delightful prospect." Despite the glimpse of the sinister in Ellis's account, Lahaina as he views it is above all that most welcoming of sights for a missionary – a garden.

Ellis's reception only confirms his initial impressions. A boat with chiefs on board carries him from his ship to land; on disembarking he is greeted by the governor of the island, Keoua; soon after he meets and is "welcomed by Mr. Stewart," a prominent missionary who was returning "from morning worship with Keopuolani and her husband."20 A prayer meeting between Stewart and Keopuolani was a weighty event, for she was a central political power in the kingdom. Her first husband was Kamehameha I, and beyond that she was a formidable figure in her own right as a descendant of one of the highest and most sacred ali'i families (unlike Kamehameha himself, who came from a parvenu ali'i family). She was now wife of the governor of Maui; and she was the mother of Liholiho, the reigning monarch of the Sandwich Kingdom. Great ali'i did not necessarily have much respect for the missionaries; Ka'ahumanu frightened them with her haughty and wilful behaviour, even though she became a fierce follower of Christianity. But the humbly born Ellis's reception on Maui was all grace and light. In his account Liholiho himself is on the island and walks the visitor to the plantation house that will host him during his stay. Liholiho is, "as usual, neatly and respectably dressed, having on a suit of superfine blue, made after the European fashion."21 Travellers regularly gave less flattering reports of native leaders, commenting on their complexion, their clothing (often a mixture of European and native), their inattention or their insobriety, but here Liholiho appears like a modern bourgeois, all dressed up and ready for the pleasantries they exchange on their walk to the house of Mr. Butler, the plantation owner.

The next person to walk on to Ellis's stage is Keopuolani herself, with whom he spends the rest of the

^{18.} Ellis (1827), p. 61.

^{19.} Ibid., pp. 61-62.

^{20.} Ibid., p. 62.

^{21.} Ibid.

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morning. Here again there is nothing to disturb the picture of the savage queen transformed by the dual graces of Christianity and civilization. "She, as well as the other chiefs present, appeared gratified with an account of the attention given to the means of instruction at Oahu, and desirous that the people of Lahaina might enjoy all the advantages of Christian education." That education is already under way: the next afternoon Ellis goes with the missionaries to their schools on the beach and sees about fifty students, many of them making good progress "in reading, spelling, and writing on slates." 22

Just as afternoon school is ending, the narrative scene shifts back to Keopuolani's house. The hula performers appear, as do five musicians, and together they start up a hula ka ra'au, a "dance to the beating of a stick": they beat small sticks (six to nine inches long) against five or six-foot staffs, their right feet "beating time" against a stone. Then comes a sensuous swirl of female dancers: "Six women, fantastically dressed in yellow tapas, crowned with garlands of flowers, having also wreaths of the sweet-scented flowers of the gardenia on their necks, and branches of the fragrant mairi [another native plant, H.L.], bound round their ankles, now made their way by couples through the crowd, and, arriving at the area, on one side of which the musicians stood, began their dance. Their movements were slow, and though not always graceful, exhibited nothing offensive to modest propriety. Both musicians and dancers alternately chanted songs in honour of former gods and chiefs of the islands, apparently much to the gratification of the numerous spectators."23 As abruptly as the spectacle begins, it ends. After a half hour Keopuolani asks the musicians to stop. The dancers sit down; and "after the missionaries and some of the people had sung one of the songs of Zion, I preached to the surrounding multitude with special reference to their former idolatrous dances, and the vicious customs connected therewith, from Acts xvii. 30."24 What are we to make

Ellis is not dismayed. He has a counter-performance to make; he preaches. There is a certain opacity to his behaviour too, for he relates the performance without a hint of exaggeration or belittlement; unlike Bingham he does not play up the erotic qualities of the dance or demean the Hawaiians' devotion to the queen mother. Perhaps his restrained response had to do with the diplomacy of the moment; if he wanted the mission to succeed on Maui and the other islands it was best to humour Keopuolani, who after all had declared that she was on his side. His behaviour belongs to a larger historical horizon as well. A minister like Ellis lived simultaneously between his nineteenth-century moment and the ever-present Acts of the Apostles. He and his fellow missionaries were spiritually conquering a new kingdom, but they were also following the commandments and re-enacting the behaviour of the early Christian community. His immediate model in the text is the Biblical verse that he cites from Acts: "The times of this ignorance God winked at, but now commandeth all men everywhere to repent." It is the apostle Paul who speaks. He is among the Athenians, a crowd of philosophers and others who are curious to hear what the newcom-

of this dramatic moment? Up to the appearance of the dancers, everything seems to move forward as in a kind of reformer's dream of the progress of civilization, of a kind that North Americans missionaries wished for native peoples. Why, then, would the queen disrupt the illusion with the rhythm of the sticks, the perfume of the flowers, the brilliance of the tapa, the dancing girls prancing through the crowd, the chants in honour of the gods and their earthly descendants? Perhaps it was a show of her own charisma. Despite the arrival of a new god, she was still a descendant of the gods whom the hula players celebrated and the people continued to adore; the spectacle was a political-theological lesson for any visitor who thought he was dealing with an ordinary mortal. One cannot say with certainty. We only know that the effect of the performance within the narrative is to disrupt the flow of the preceding vignettes with their perfect garden, perfect royal hosts, and near-perfect school children.

^{22.} Ibid., p. 63.

^{23.} Ibid., pp. 63-64.

^{24.} Ibid., p. 64.

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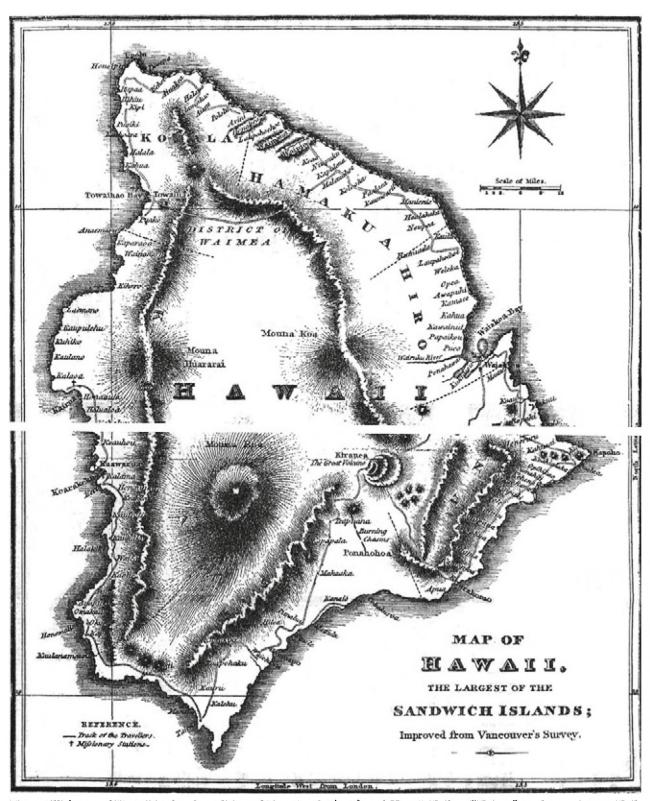


Fig. 2. Ellis' map of Hawaii in the 1827 edition of *Narrative of a Tour Through Hawaii*. Kailua ("Kairua" on the map), now Kailua-Kona, the place where Ellis met Kuakini, the governor of Hawai'i, and where a missionary station was established, is at the broad bay in the central part of the west coast.

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KUAKINI.

Governor of Hawaii.

Fig. 3. Kuakini. Engraving in the 1827 edition of *Narrative* of a Tour Through Hawaii.

er has to say. Some laugh and others turn thoughtful as he tells them about the resurrection of the dead and the coming day of judgment. Ellis's dialogue with the Hawaiians on Maui and have their model in this original confrontation of pagan and Christian deities.

Second Hula Encounter: Hospitality and Indifference at Kailua

On July 14, Ellis arrived at last at Kailua, where he met the governor of Hawai'i, Kuakini, and joined up with his fellow missionaries, who had taken a separate ship a few days before Ellis's departure. ²⁵ Here again Ellis is treated to hula performances in honour of the ruling *ali'i*. In the afternoon of his day of arrival "a

party of strolling musicians and dancers" arrives at Kailua, "followed by crowds of people, and arranged themselves on a fine sandy beach, in front of one of the governor's houses, where they exhibited a native dance, called hura araapapa [hula ala'a papa, a sacred dance, H.L.]. This time there were again five musicians, who were keeping rhythm with calabashes by striking them on the ground and beating them with their fingers or the palms of their hands. A single male dancer worked his way through the crowd:

His jet-black hair hung in loose and flowing ringlets down his naked shoulders ... A beautiful yellow tapa was tastefully fastened round his loins, reaching to his knees. He began his dance in front of the musicians, and moved forwards and backwards, across the area, occasionally chanting the achievements of former kings of Hawaii. The governor sat at the end of the ring, opposite to the musicians, and appeared gratified with the performance, which continued until the evening. ²⁶

Nothing rattles Ellis: once again he is the appreciative tourist, admiring the neatly made instruments and the yellow tapa without a hint of protest at the profuse dark locks of the dancer; this time he observes without even the counter-performance of a sermon.

The next day, at about the same time, Ellis is treated by the governor to yet another hula performance, this time with seven musicians playing wooden drums with sharkskin heads, and two children, a boy and a girl "apparently about nine years of age," performing the dance, "cantilating, alternately with the musicians, a song in honour of some ancient of Hawaii." Ellis then gives a detailed account of the audience response:

The governor of the island was present, accompanied, as it is customary for every chieftain of distinction to be on public occasions, by a retinue of favourite chiefs and attendants. Having almost entirely laid aside the native costume, and adopted that of the foreigners who

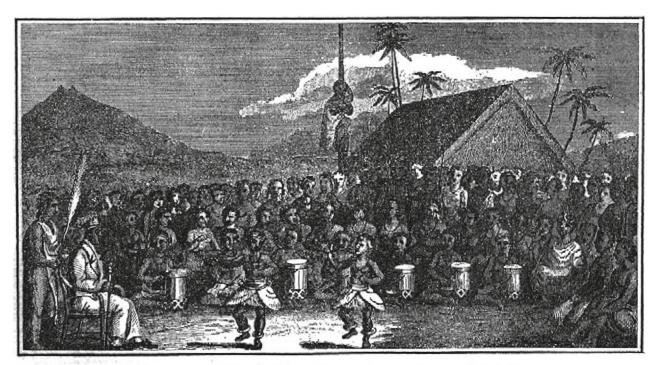
^{25.} The position of Kailua on the west coast of Hawai'i is seen on Ellis' map of Hawai'i in Fig. 2. Kuakini, in traditional clothes, is portrayed by Ellis in Fig. 3.

^{26.} Ibid., pp. 85-86. On the *hula ala'a papa* see Emerson (1909), p. 57-72. According to Emerson, this dance was reserved for high-rank *ali'i*.

^{27.} Ellis (1827), p. 90. The scene is the only *hula* illustrated by Ellis; his illustration is reproduced here as Fig. 4.

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A Hura, or Native Dance, Performed in Presence of Governor Kuakini at Kairua.

Fig. 4. Ellis' first hula at Kailua on Hawai'i, the *hula ala'a papa*. It is performed with five musicians in the presence of Kuakini, the governor of Hawai'i. Engraving in the 1827 edition of *Narrative of a Tour Through Hawaii*.

visit the islands, he appeared on this occasion in a light European dress, and sat on a Canton-made arm chair, opposite the dancers, during the whole exhibition. A servant, with a light kihei of painted native cloth thrown over his shoulder, stood behind his chair, holding a highly polished spittoon, made of the beautifully brown wood of the cordia in one hand, and in the other a handsome kahiri [kahili, H.L.], an elastic rod, three or four feet long, having the shining feathers of the tropicbird tastefully fastened round the upper end, with which he fanned away the flies from the person of his master. The beach was crowded with spectators, and the exhibition kept up with great spirit, till the overspreading shades of evening put an end to their mirth, and afforded a respite to the poor children, whose little limbs must have been very much fatigued by two hours of constant exercise. We were anxious to address the multitude on the subject of religion before they should disperse; but so intent were they on their amusement, that they could not have been diverted from it.28

His host Kuakini was another formidable player in Hawaiian politics: he was the brother of Ka'ahumanu, hence from a high-ranking family; his sister linked him to the inner circle of the monarchy. Marshall Sahlins has described how his sister and her clan were in fact the real rulers of the islands after the death of Kamehameha I: Liholiho was a sacred figurehead, while the tempestuous Ka'ahumanu divided up the kingdom with her brothers. In the 1820s Kuakini was a non-nonsense leader who did not tolerate wild drinking by sailors and knew how to cut a deal with Western businessmen.²⁹ We see the evidence of his urbanity here: he dresses like a European, although he allows himself to be fly-swatted by the *kahili*, a symbol of high rank. In a hint of the global economic connec-

^{29.} Sahlins and Kirch (1992), pp. 60-61, 79. Sahlins also discusses the sandalwood trade and its disastrous consequences. On Kuakini's political and economic role see also Kuykendall (1938), pp. 125, 130-132, 183.

^{28.} Ibid., pp. 90-91.

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tions of the kingdom, he sits on a Chinese-made chair, a reminder of the trade in sandalwood that brought huge profits to ali'i as foreign traders until the hills had been stripped and the market collapsed later in the 1820s. For the success of his tour Ellis was completely dependent on Kuakini. Before the hula began on the day after his arrival, he and Kuakini met to discuss his travel arrangements. The ruler provided him with a canoe for their baggage and a guide, "without any recompense whatever."30 An ali'i knew how to put the missionaries in his debt for his generosity. He also knew how to deflect their ambition to convert their hosts. Whatever preaching Ellis was going to do was overwhelmed by the wave of Hawaiian festivity, the "mirth" of the crowd that drowned out any attempts at preaching.

Third Hula Encounter: Ellis Confronts Pelé on the Heights of Kilauea

Why did Ellis not protest this display of power and indifference to the whole point of his visit? Clearly it was politic not to interfere with his host's idea of an evening entertainment, especially one that avoided anything like a minister's conception of indecent drinking or erotic suggestion. Moreover Ellis seems to have had a different personality from the killjoy New Englanders; one has the impression from his narrative and his successful later career of a genial man who know how to balance his missionary aims with a warm interest in the different people he met. Perhaps, too, he was optimistic at this early moment about the Hawaiian mission's future and could humour the Hawaiians as they made the transition from an ebullient, warlike, spectacle-loving people to what he hoped would be a meek and mild Christian society.31

There is another reason for Ellis's sympathetic treatment of Hawaiian culture. His *Narrative* was a work of literary Romanticism, as he makes clear in describing the final performance of his second evening with Kuakini: at dinner the ministers and Kuakini's entourage are joined by "an interesting youthful bard, twelve or fourteen years of age" who sings "in a monotonous but pleasing strain, the deeds of former chiefs, ancestors of our host." With his playful contrasts of Hawaiian and European times and places Ellis distances the performance from ancient Greece and medieval Europe, yet places it in a recognizable continuity with them. The visit to Hawaii permits him to time-travel to favourite scenes of the Romantic literary imagination. 33

The word "romantic" itself pops up frequently; we have seen a typical example in his description of the pleasant greens and dark valleys of Maui. The soaring mountains of Hawai'i give Ellis many chances to use the rhetoric of the sublime, capturing the effect of a nature that is so overwhelming that it surpasses human measure and description. So too does a natural wonder of the island: Ellis and his party are the first Europeans to visit the live volcanic lakes at Kilauea. On the way he and his companions, including Hawaiian guides as well as fellow missionaries, stay overnight at a cavern that inspires a vision of the strange and supernatural: as they clear their space for the night "a large fire was kindled near the entrance, which, throwing its glimmering light on the dark volcanic sides of our apartment, which resembled, in no small degree, scenes described in tales of romance." They counter the preternatural scene by hymn-singing and committing themselves "to the kind keeping of Him, whose wakeful eye and watchful care no dark cavern can exclude."34 The narrative reaches its climax in the viewing of the volcanic lakes, a source of

^{30.} Ellis (1827), p. 89.

^{31.} Ellis comments extensively on the warlike character of the Hawaiians and their love of athletic competitions. See ibid., pp. 132-138. And adds his hope for the future: "There is every reason to hope," he adds, "that Christianity, when more generally received, will subdue their restless and ambitious spirits; and under its influence they may be expected, like the southern islanders, to delight in the occupations of peace, and

cease to learn the art, or find satisfaction in the practice, of war." Ibid., pp. 148-149.

^{32.} Ibid., pp. 91-92.

^{33.} On the connections between literary Romanticism and Pacific encounters, see the editor's note in McCalman (1999), p. v.

^{34.} Ellis (1827), p. 215.

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native belief and terror, for this is the home of the feared goddess Pelé. They first take in the wild terror of the place: "After walking some distance over the sunken plain, which in several places sounded hollow under our feet, we at length came to the edge of the great crater, where a spectacle, sublime and even appalling, presented itself before us - 'We stopped, and trembled.' Astonishment and awe for some moments rendered us mute, and, like statues, we stood fixed to the spot, with our eyes riveted on the abyss below."35 Here again Ellis encounters the hula. This time it is in the abode of the gods. The "natives" spend most of the night talking about what they have seen in "the primeval abode of their volcanic deities"; they believe that "the roaring of the furnaces and the crackling of the flames were the kani of their hura [hula HL], (music of their dance, W.E.) ...36 Ellis and his companions respond to the Hawaiians' description of the abode of the guides with a scientific explanation of volcanoes. Their debunking of native superstition is a first step toward the path to the true God. They follow it up with a counter-performance: the next morning the missionaries "sang our morning hymn of praise, in which we were joined by the natives who were with us."37 Once again performance and counter-performance mark the journey. This time there is an additional literary inflection: Ellis brings in the vocabulary and rhetoric of Romanticism to represent untamed nature and culture. He tames it with dialogue and with the counter-performance of the Christian hymn.

Conclusion: From Puritan-Polynesian Synthesis to Nationalist Revival

The story did not end as Ellis had hoped. If the early 1820s were a moment of seemingly providential success, by the 1830s the missionaries found themselves unable to control the boom town of Honolulu and the whalers, merchants and sailors passing through it.

It had turned into a riotous frontier outpost, not become the Geneva of the Pacific. Public mores went unreformed; political and economic control passed into the hands of the profiteers from the United States and other countries who refused to accept limits on their trade in the sole entrepôt of the North Pacific, the meeting-point for ships crossing north, south, east and west. At first sight it might appear that the missionaries had greater success with their Hawaiian audience: they felled the native gods, the islands were Christianized. By the end of the nineteenth-century travellers like Robert Louis Stevenson and Mark Twain commented on their disappointment with cleaned-up, westernized Hawaii.³⁸

Yet here, too, appearances deceive. If we turn back again to artistic performance, a more complicated story of competing cultures emerges. In the second half of the century, the penultimate monarch, David Kalākaua, tried to rally the forces of native society and culture against the Western invaders who were on the verge of taking political control of the islands. Kalākaua spent extravagantly on gathering and reinventing native culture, and at the time he was often viewed as a spendthrift or partier. Yet the art historian Stacy L. Kamehiro has recently shown in her book The Arts of Kingship how skilfully Kalākaua built Iolani Palace and other monuments to invoke the sacred traditions of the lands and people of the islands.39 The Hawaiian cultural revival did not end there; it continued with his successor, Queen Liluokalani, the last Hawaiian monarch, who continued his work of gathering up antiquities and supporting native arts. This was of a piece with European cultural movements of the same period in Europe, like the Celtic Revival in Ireland or the revitalization of Czech and other European cultures, that were acts of resistance to the cultural hegemony of empires. Despite the defeat of the monarchy, Kalākaua, Liliuokalani and others, including sympathetic Europeans, gathered the materials for

^{35.} Ibid., pp. 225-226.

^{36.} Ibid., pp. 235-236.

^{37.} Ibid., p. 242.

^{38.} Lamb, Smith and Thomas (2000), pp. 275-291 and 299-304, especially Vanessa Smith's editorial comments on pp. 274 and 300.

^{39.} Kamehiro (2009).

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ongoing cultural revivals. Today a new cultural and political assertiveness has led to a revival of the Hawaiian language, contestation of control over sacred sites, and separatist political aspirations.

We can see a microcosm of the long rhythm of Hawaiian culture if we go back again to the island's musical and performative traditions. Music did not exist as a separate and distinct art in pre-contact Hawai'i; it belonged to sacred and social performances such as chants to honour ali'i and of course the hula. The American missionaries quickly set about teaching Western music to the Hawaiians, flooding the islands with thousands of copies of hymns, translating them into Hawaiian, making them part of the school tradition. Himeni became a native Hawaiian word for these compositions. Yet the native Hawaiians not only embraced them, but turned them into something distinctively their own. Among the most prominent composers of the second half of the nineteenth century were David Kalākaua and Queen Liluokalani; these monarchs were gifted poets and musicians whose compositions today are considered part of the canon of native Hawaiian music.40

Ellis and his hymn-singing companions remind us that this process started out as a competition between two cultures, pursued diplomatically by Ellis in 1822 and more aggressively by the American missionaries. Yet what happened in the end was not the eradication of native Hawaiian culture awaited by the missionaries, but a complex process of borrowing, blending, and creating new traditions for the nineteenth and twentieth century. Ellis's travel account shows us right from the beginning some of the reasons for this unexpected interaction between cultures. There was the power of the land, the social system, and the culture, all of which so visibly left their mark on Ellis's text, undermining the Christian hegemony that he hoped to establish. And there was the Romantic imagination, which shaped his text and did much to validate the culture for the modern era, just as the Romantic moment was crucial for the "invention of tradition" elsewhere. Ellis opened up a world of religious, national and cultural ironies that, contrary to his own expectations and those of his fellow missionaries, belongs to the core of nineteenth and twentieth-century global history.⁴¹

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^{40.} On Hawaiian music since the late nineteenth century, see Lewis (1984), Stillman (1999), and Tatar (1987).

⁴¹. Cf. the history of cultural mixings and religious revivals in Bayly (1983).

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

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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 deal with a number of travellers who sailed on the Red Sea between 1760 and 1830. Mostly the contributions have

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

focussed 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

I. 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

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-

consult the English original for the review.

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. 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. 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

^{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 Niebuhrs 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 Babel-Mandab. 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. 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-feet quadrant ..., I found it to be 31° 11' 16": ..." 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. 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

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.

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 weft, 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 Babel-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

^{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

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."

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

^{30.} Niebuhr (1791).

^{31.} Bruce (1790), Vol. 1, p. 68.

^{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).

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° o' 1" is obviously a printing or clerical error. According to my observations it is 21° 28'. 4° 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.} Nebuhr 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 northeast of the city (my *Reisebeschreibung*, first volume, p 258).⁴³

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.

^{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."

^{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 Táaif and in the

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).

^{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.

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 Hedsjàs [Hejàz] 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. lxv-lxvi); 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-

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

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

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

^{53.} The naval battle at Çheşme 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 $6^{\rm th}$ 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.

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

^{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.

^{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 daybreak 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 acaciatrees 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 Macowar 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 Macowar" 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	-	, - 2	-	? 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	¹ -	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	l Not marked	-	-
Cape Israel	Cape Israel	Not marked	-	Ras Issa
Gebel Zekir	Jibbel Zekir	Jibbel Zekir	-	Jebel Zucur
Gebel Arroe	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° 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° 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° 37' 55" N, 42° 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° 15' 39" and 15° 27' 18" N and 42° 32' 00" and 42° 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

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).

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

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 Arroe". 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° 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° 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 breath. 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

87. As shown by De La Rochette (1781) the island of Perim is horse-shoe-shaped, with the opening facing towards southwest; 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.

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

^{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° 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° 40' 52" north, and in long. 42° 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° 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° 04' 44" N, 42° 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° 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. I, 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. I, 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.

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 not, 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.

^{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. &}quot;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 Bánâs, 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

[&]quot;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." 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 1 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 Coseir, 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". Longe 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. 1, 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:¹⁰

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]." 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." 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,112 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'. I think it impossible to account for these errors in any other way than by considering the whole voyage as an episodical 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, 114 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' 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. 15 ... It

II2. 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

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

III. 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".

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 Babel-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, "6 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. 17 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. 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. 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 surrey of the Red Sea." St. John presented his critical view of Niebuhr at the end of his popular account of Niebuhr's voyage: 124

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

^{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.

^{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." ... 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 Bánâs (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 (Sähel), 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. 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: rst. The silence of Signior Balugani, who was employed by Mr. Bruce to keep the Journals; 2^d. The Observation appearing in the original

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).

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 landwith 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 surveyingvessels; ... 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*. ³⁸

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")

^{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).

^{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: 144

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

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 rst 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

^{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 Nibuhr'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.

^{142.} Bruce (1804), Vol. I, 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 southeastern 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 (Bescreibung 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-

Ullendorff has suggested: "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. 48 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

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.

^{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 aera 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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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=BNCF0003496016. A slightly different version of this chart has been seen at the Royal

^{150.} Detailed discussion of this in Thulin (1990).

^{151.} Hopkins (1967); Baack (2013).

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Contributors

Lawrence J. Baack, Professor emeritus, Visiting Scholar, Department of History, University of California, 3229 Dwinelle Hall, Berkeley, CA 94720-2550, USA. Author of many articles and books on the history of Germany and Denmark, particularly dealing with the eighteenth century, the Enlightenment and the many reforms of the period. Author of Agrarian reform in eighteenth-century Denmark (1977), Christian Bernstorff and Prussia: Diplomacy and Reform Conservatism, 1818-1832 (1980), articles on the Arabian Journey, including A naturalist of the Northern Enlightenment: Peter Forsskål after 250 years, "A Practical Skill that Was Without Equal": Carsten Niebuhr and the navigational astronomy of the Arabian journey, 1761-7 and of a forthcoming book on the Arabian Journey, Undying Curiosity: Carsten Niebuhr and the Royal Danish Expedition to Arabia, 1761-1767. E-mail: ljbaack@ pacbell.net

Daniel Carey, Professor, School of Humanities, National University of Ireland, Galway, University Road, Galway, Ireland. He is author of Locke, Shaftesbury, and Hutcheson: Contesting Diversity in the Enlightenment and Beyond (2006) and editor (with Claire Jowitt) of Richard Hakluyt and Travel Writing in Early Modern Europe. The Hakluyt Society Extra Series (2012); (with Lynn Festa), The Postcolonial Enlightenment: Eighteenth-Century Colonialism and Postcolonial Theory (2009); and Asian Travel in the Renaissance (2004). He is currently completing a comprehensive cultural history of travel in the Renaissance. He is co-general editor of the first-ever critical edition of Richard Hakluyt's Principal Navigations (1598-1600) for Oxford University Press. He has published in a range of interdisciplinary journals on literature, the history of philosophy, history of science, anthropology, and travel. E-mail: daniel.carey@nuigalway.ie

Michel-Pierre Detalle, Ecole Pratique des Hautes Etudes. Has authored articles and books about cultural, historical and religious subjects, e.g. the book La Piraterie en Europe du Nord-Ouest a L'Epoque Romaine (2002) and the article L'Islam vu par Carsten Niebuhr, voyageur en Orient (1761-1767). E-mail: midetalle@orange.fr

Renaud Detalle, International civil servant after studying history and political science in Paris and Berlin, author of articles on the contemporary Middle East and others, co-authored with Michel-Pierre Detalle, on Carsten Niebuhr. E-mail: rdetalle@yahoo.com

Ib Friis, Professor, Natural History Museum of Denmark (Botany), University of Copenhagen, Sølvgade 83, Opgang S, DK-1307 Copenhagen K, Denmark. Author of papers and books on tropical botany, plant geography, useful plants, etc., mainly relating to the Red Sea, the Horn of Africa (Eritrea, Ethiopia, Somalia) and East Africa. Author, with P. Hulton and F.N. Hepper, of the book Luigi Balugani's Drawings of African Plants: from the Collection Made by James Bruce of Kinnard on His Travels to Discover the Source of the Nile 1767-1773 (1991) and a book on the plants of the Arabian Journey, with F.N. Hepper, The Plants of Pehr Forsskål's 'Flora Aegyptiaco-Arabica' – collected on the Royal Danish Expedition to Egypt and the Yemen (1994). E-mail: ibf@snm.ku.dk

Roger Guichard, Independent scholar. 347 Pimlico Drive, Walnut Creek, CA 94597, California, USA. Specializing in the history and exploration of Egypt. E-mail: rguichard3@hotmail.com

Anne Haslund Hansen, The National Museum of Denmark, Collection of Classical and Near Eastern Antiquities, Ny Vestergade 10, DK-1220 Copenhagen CONTRIBUTORS SCI.DAN.H. 4 · 2

K, Denmark. Specializing in Middle Eastern archaeology, the history of museum collections and the Egyptian antiquities in European cultural history, including the antiquities from the *Arabian Journey*, which subject she is preparing a book about. With Stig T. Rasmussen she has edited and published *Min Sundheds Forliis* [The shipwreck of my health], the hitherto unpublished travel diary of Frederik Christian von Haven, the philologist on the Arabian journey. E-mail: anne.haslund.hansen@natmus.dk and ahaslundh@gmail.com

Michael Harbsmeier, Professor at the Department of Culture and Identity, University of Roskilde, Universitetsvej 1, 3.2.2, DK-4000, Roskilde, Denmark. Author of a monograph on early modern German travel writing (Wilde Völkerkunde. andere Welten in deutschen Reiseberichten der frühen Neuzeit (1994)) and numerous contributions to the comparative study of travel writing and travel accounts as sources for the global history of culture and mentalities and the history of scholarship and science. He also wrote the introduction to the recent translation of Carsten Niebuhr's Reisebeschreibung into Danish (2003). E-mail: miha@ruc.dk

Jonathan M. Hess, Professor, Department of Germanic Languages and Literatures Moses M. and Hannah L. Malkin Distinguished Term Professor of Jewish History and Culture, Director, Carolina Center for Jewish Studies, 426 Dey Hall, CB# 3160, University of North Carolina at Chapel Hill, Chapel Hill, NC 27599. Author of books and articles about German cultural, intellectual and literary history from the eighteenth century on, with particular emphasis on both German-Jewish studies and the legacy of the Enlightenment, including *Germans, Jews and the Claims of Modernity* (2002). E-mail: jmhess@email.unc.edu

Harry Liebersohn, Professor, Department of History, University of Illinois, 309 Gregory Hall, 810 S Wright St., Urbana, IL 61801, campus mail code: MC-466, USA. Author of articles and books on the intellectual history of modern Europe, especially Germa-

ny, and on how people from different cultures behave in personal encounters, as well as the effects of these meetings on the arts, sciences and politics. Encounters between European travellers and indigenous people in North America and the Pacific are the subject of a number of Liebersohn's publications, for example *The Travelers' World: Europe to the Pacific* (2006). E-mail: hliebers@illinois.edu

Peter Ulf Møller, Professor emeritus and Honorary professor, Department of Cross-Cultural and Regional Studies, University of Copenhagen, Snorresgade 17-19, DK 2300 Copenhagen S, Denmark. He has published books on Vitus Bering and the Russian Kamchatka Expeditions: Kommandøren og konen – Arkivfund om danske deltagere i Vitus Berings ekspeditioner [The commander and his wife – new discoveries in archives about Danish participants in Vitus Bering's expeditions. 1997, with Natasha Okhotina Lind], Under Vitus Bering's Command – New Perspectives on the Russian Kamchatka Expeditions (2003, with Natasha Okhotina Lind) and The Journal of Midshipman Chaplin – A Record of Bering's First Kamchatka Expedition (2010). E-mail: peterulf@hum. ku.dk

Philippe Provençal, Research fellow, Natural History Museum of Denmark (Zoological Museum), University of Copenhagen, Universitetsparken 15, DK 2100 Copenhagen Ø, Denmark, previously scientific assistant at the Natural History Museum, Århus, and external lecturer in Arabic at the University of Southern Denmark. Author of books and articles about Arabian language and culture, especially names and uses for plants and animals, e.g. Arabisk medicin [Arabian medicin] (2007) and The Arabic Plant names of Peter Forsskål's Flora Aegyptiaco-Arabica. E-mail: pp@nathist.dk

Catharina Raudvere, Professor, Department of Cross-Cultural and Regional Studies, University of Copenhagen, Snorresgade 17-19, 2300 Copenhagen S, Denmark. Among other subjects within the field *History of Religions* she has studied Islam in Europe with special focus on the Balkans and Turkey, and has published articles and books about these subjects, includ-

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Jørgen Bæk Simonsen, Professor, Department of Cross-Cultural and Regional Studies, University of Copenhagen, Snorresgade 17-19, 2300 Copenhagen S, Denmark. Historian, specializing in the Islamic world, published in 1988 a thesis on Islamic taxation. In 2001-2005 he was Director of the Danish Institute in Damascus, and since then Professor at University of Copenhagen. Among his recent works are the book *Islam in a changing world* (1997) and articles and contributions in English and Danish. Among the latter are works addressed to a wider audience about Islam, including *Islam i Danmark*. *Muslimske institutioner og organisationer i Danmark* 1970-89 [Islam in Denmark. Muslim

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Charles W.J. Withers, Professor, Ogilvie Chair of Geography, Institute of Geography/School of Geo-Sciences, University of Edinburgh, Drummond Street, Edinburgh, EH8 9XP, Scotland, UK. He has written, edited and published a substantial range of articles and books about geography and mapping, the ideas and history of geography and travel writing, not least in relation with the Enlightenment, Scotland and Scottish travellers, e.g. Placing the Enlightenment: Thinking Geographically About the Age of Reason (2007) and Geography and Science in Britain, 1831-1939: a study of the British Association for the Advancement of Science (2010). E-mail: C.W.J.Withers@ed.ac.uk

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