

NATTERER

The true story of an amazing naturalist.

**Johann Baptist Natterer and his prominence in the
Austrian scientific expedition to Brazil 1817-1835)**

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Portuguese-English translation and Copyediting
Renato Rezende and team (American English)

Wanderings of a collector.

Natterer's records in letters, journal, and notes.

Text

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International Cataloging Data in Publication (CIP)

Imperial Petrópolis Museum – Librarian Márcio Miquelino

N282

Natterer on the Austrian expedition to Brazil (1817-1835)
organized by Cristina Ferrão and José Paulo Monteiro Soares.
Petrópolis : Kapa Editorial ; Rio de Janeiro : Editora Index, 2019.
300p. : il. ; 31x25cm.

Includes bibliography.
ISBN 978-65-81403-01-0

1. Naturalism [Naturalismo]. 2. Natterer, Johann, 1787-1843.
3. Scientific Expeditions – Brazil [Expedições científicas – Brasil].

CDD 918.1

Organized by
Cristina Ferrão
José Paulo Monteiro Soares

NATTERER

on the Austrian Expedition to Brazil
(1817-1835)

Kapa Editorial & Editora Index | 40 anos
Rio de Janeiro | Petrópolis | São Paulo
2019





FERDINAND LUKAS BAUER
Conchocarpus macrophyllus.
Hand-colored lithograph, 1820.
NHMW

Sponsors Message

For many decades we've encouraged the companies we are part of to sponsor publications which disseminate knowledge about Brazil, its economy, history, nature and artistic output. Clemente Mariani (1900-1981) began this tradition in the 1950's, upon becoming president of Banco da Bahia S.A., and his descendants have found it important to follow in his footsteps.

Through this activity over all these years, we've grown closer to the historical figure of the Archduchess Leopoldina (1797-1826) who, with her political role and support for scientific knowledge, contributed to the creation of our nation state.

This latest book that we have sponsored provides descriptions and accounts of the Austrian Mission to Brazil, highlighting the figure of Johann Natterer (1787-1843) and the excellence of his work as a naturalist and ethnologist.

The mission was planned by the Foreign Minister of the Austrian Empire, Klemens Von Metternich (1773-1859), after November 1816, and as he made arrangements for Leopoldina's marriage to the Prince Regent of the United Kingdom of Portugal, Brazil and the Algarves, Pedro de Alcântara (1798-1834). The expedition had already left for Brazil from Trieste prior to the nuptials, which were carried out by proxy in May 1817.

In her text, Christa Riedl-Dorn shows that Austria's presence in Brazil precedes the Mission by over a century. The evangelizing efforts in the New World by Jesuits were well-known to Brazilians through Manuel da Nóbrega (1517-1570) and José de Anchieta (1534-1597), working in the 16th century, as were the contributions by Austrians which continued into the next century, particularly by Anton Clemens von und zu Rechegg, knight and Baron of Kaltern (1655-1733). He lived for nearly 42 years in the region of the Missions, then an ill-defined frontier between Portuguese and Spanish lands, evangelizing the Guarani Indians, and his travel accounts became very popular.

The Age of Enlightenment ushered in greater interest in the accounts and documentation of journeys to exotic countries. From 1778, German-speaking Europeans gained access to such narratives, with the German translation of the work *A Voyage Round the World in His Britannic Majesty's Sloop, Resolution, Commanded by Capt. James Cook, During the Years 1772, 3, 4, and 5*, by Georg Forster (1754-1794), a German naturalist of Scottish origin, who with his father Johann Forster (1729-1798), also a naturalist and pastor, took part in James Cook's second voyage. A member of the Royal Society at just 22, Georg Forster was a prolific writer and translator into German of narratives of journeys from all over the world, and he also translated the diaries of James Cook (1728-1779) and William Bligh (1754-1817).

In 1785, aged 21, Alexander Humboldt (1769-1859), then at university, met Georg Forster in Göttingen. The following year a group, which included Forster as teacher and Humboldt as pupil, travelled through Continental Europe visiting botanical gardens, mines, ports and churches. Ten years later, Humboldt, by then a member of a group of the foremost intellectuals of Weimar Classicism, embarked on his tour of the American continent, from 1799 to 1804, although it didn't include the Portuguese colony of Brazil. Back in Paris from 1807, Humboldt began the publication of his work *Le voyage aux régions équinoxiales du Nouveau Continent, fait en 1799-1804*.

The great military and political transformations in Europe in the early 19th century were soon followed by others in the scientific and technical fields, which Humboldt took an important role in influencing and disseminating.

Leopoldina, with her interest in botany and mineralogy (hence her proximity to José Bonifácio de Andrade (1763-1838), the mineralogist and main coordinator of Brazil's Independence), was a contemporary of both Humboldt and Klemens Von Metternich, who spearheaded a project to rescue the prestige of conservative monarchies. Both were influenced by her ideas and fell under her aegis.

Johann Natterer spent 18 years in Brazil, 11 of them in the Amazon. The prominence afforded him in this book, of his accounts and collections, is due to the efforts of Ambassador Marianne Feldmann to bring an exhibition to Rio de Janeiro, with objects and illustrations from the Brasilianum (Brazilian Museum) which held Johann Natterer's collections from 1821 to 1935. The exhibition was to be part of the celebrations of the 200th anniversary of the Archduchess Leopoldina's arrival in Brazil, but due to the bureaucratic challenges inherent to such a project, the initiative is only now bearing fruit, in the form of this book.

Johann Natterer's life story, along with that of other members of the Austrian Mission (and the contemporary Bavarian Mission to Brazil), is fundamentally tied to our country, as these texts by Fernanda Silva Dias de Aquino, Jéssica Uhlig Amorim Vasconcelos de Araújo, Luiz Barros Montez, Rafael Chaves Santos and Christa Riedl-Dorn show. Of course, his story was also linked to his times, the virtues and vices of science and ideologies of that era. His vision of Brazil, specifically the Amazon, produced extraordinary scientific descriptions and increased our knowledge of the natural sciences and ethnology. It is no surprise that for Alfred Russel Wallace (1823-1913), the naturalist who developed a theory of natural selection parallel to that of Charles Darwin (1809-1882), Natterer became an important reference during his expedition to the Amazon between 1848 and 1852.

Natterer pointed to the future through science, but was tied to the past, something revealed in his behaviour and writings about slavery in Brazil. It is true that Great Britain and France only eliminated slavery definitively from their colonies in 1833 and 1905, respectively, but the ease with which he reacted to the Brazilian slavery system shows that he never took into account the public condemnation of the slave trade made by European powers at the Congress of Vienna of 1815, which referred to the activity as "repugnant to the principles of humanity and universal morality".

In sponsoring this book we seek to pay tribute to the naturalists and ethnologists who collected such vast knowledge based on their encounters with the diversity of our nature and indigenous peoples, perceiving the value of both, for the well-being of future generations.

We also pay tribute to the Archduchess Leopoldina for her role and example in the constitution of our State and for encouraging our scientific research.





Griffolia hyacinthina

Editors' note

The relationship between Austria and Brazil has a history going back centuries. The archive – which is vast – is considered one of the most important about Brazil. Since 1995, our publishing houses Index and Kapa have been casting an ever attentive eye on this archive. In over 40 years working in Brazil and abroad – with publications such as this – we've fulfilled many dreams, highlights among which are the publication of the Dutch Brazil collections from the 17th century, numbering 23 volumes; the collection *Viagem ao Brasil de Alexandre Rodrigues Ferreira* [Alexandre Rodrigues Ferreira's Journey to Brazil] from the 18th century, containing 21 volumes; and this present work about the 19th century, making a total of 12 books.

With her Austrian Mission, Empress Leopoldina brought to Brazil several painters, scientists and naturalists, and it was they collected this precious archive. Some are in museums in Austria, where we did research, such as the Weltmuseum Wien, Naturhistorisches Museum Wien [NHMW], and Akademie der bildenden Künste Wien [K.AKAD], to name the most important.

As well as the Natterer collections, we also felt the need to include in this book the other artists and scientists who embarked on the same expedition. Naturally, many paintings and reproductions were produced later in Austria, based on the originals and material collected in the field, which arrived from Brazil.

We also did research in Brazil, at the Museu Imperial de Petrópolis, Museu Nacional de Belas Artes (M NBA), Biblioteca Nacional do Rio de Janeiro, Biblioteca Histórico Nacional, Museu Histórico Nacional, Museu Nacional – UFRJ, as well as in private collections. As well as the fact that this important historical archive is held in the above-mentioned collections, another dream has come true with this new work: to disseminate Brazilian History and produce a fine reference book.

We cannot forgo mentioning Pedro H. Mariani and Glória Mariani – rare partners in editing this work – who, with their comments and observations, not only contributed to its aesthetic beauty but also the intellectual content. We'd also like to thank the ever attentive André Krepel's for his efficiency, Maria da Glória Afflalo, so skilled at dealing with the all challenges inherent in the editing of a book, and the Austrian Embassy in Brazil and its staff, who have always lent their support to our publications, as well as the authors and all those who took part in creating this book.

Cristina Ferrão
José Paulo Monteiro Soares

MICHAEL SANDLER
Grifnia hyacinthina
Hand-colored lithograph, printed by the
Lithographic Institute of Vienna, 1820.
NHMW

Foreword

Marianne Feldmann

October, 2019

My first contact with Johann Natterer was in 1988 when, as a young diplomat recently arrived at the Austrian Embassy in Brasilia, I helped a professor at the University of Brasilia – whose name I do not remember – to prepare a trip to Vienna in order to look for the traces of the naturalists who accompanied the young Archduchess Leopoldina on her wedding trip to Brazil.

The teacher came back enthusiastic due to the vast collections he found in the Naturhistorisches Museum Wien (NHMW) – where there were more than 150,000 objects – and the ethnographic collection of the so-called Museum für Völkerkunde – a museum of anthropology that is now called Weltmuseum Wien. This latter's collection – consisting of more than 2,000 objects that are the result of Johann Natterer's journeys to Brazil between 1817 and 1835 – was incredible. I had the idea of organizing a photographic exhibition of the plenary art collected by Natterer, however, with the birth of my first daughter and the subsequent maternity leave, I could not have time to fulfill this dream.

Returning to my former post, in 1995, the first task was to seek out partners to organize this exhibition. To my surprise, there was already a similar project: Professor Vitor Leonardi, from the University of Manaus, was preparing a mission to know the collection of the Anthropology Museum of Vienna (now renamed Weltmuseum Wien). We managed the financing with Austrian companies and the result was 350 beautiful photos gathered in an exhibition we showed all over Brazil. The collection was reflected in the main Brazilian newspapers. *O Estado* and *Folha de São Paulo* dedicated entire pages to the importance of this memory of Brazil in the Austrian capital. "Brazil finds 19th century Indian treasure lost in Austria" was the headline of one of the main news.

At the opening of the exhibit in Brasilia, at UNB, I met one of the diplomats who devoted himself to preserving the Brazilian cultural heritage: Ambassador Wladimir Murtinho. He introduced me to his long-time friend, publisher Cristina Ferrão, who, together with José Paulo Monteiro Soares, was responsible for a book editing line on the recovering of Brazilian historical documents and iconographies in archives abroad called, as the ambassador well said, "Project Rescued." This contact bore fruits to this day and culminates now in the book that is in your hands.

Together we went to discover the "Lost Treasures" in Vienna, which were not so lost, but very well catalogued and incredibly well preserved indeed. It is impossible to describe the emotion one feels when seeing personally the vast material collected by Natterer. We entered the basements of the Viennese museums, we imagined the transport adventures of each object that had left the Amazon River and its tributaries until arriving in Vienna, where they were first exhibited at Belvedere Castle. Later, due to the enormous quantity of pieces that continued to arrive year by year, the Emperor Francis I – father of Leopoldina and passionate naturalist – opened the doors of a palace in the center of Vienna to make it the first (and only) museum dedicated exclusively to Brazil in Europe, the "Brasilianum".

The publications resulting from these first contacts are many. Among them I would like to highlight a complete edition of the watercolors of one of the travel companions of Natterer to Brazil, the young painter Thomas Ender, and *Olhares Cruzados*, a book that until today is an important commemorative edition about the 200 years of the arrival of D. Leopoldina to Brazil. However, we continued with the purpose of dedicating an exclusive publication to A man who may have been the world's greatest collector on Brazil's history. Johann Natterer. He had a not only scientific look, but also a profound artistic sensibility that can be noticed in every object that is preserved to this in Vienna.

And here is, the edition of a magnificent book that finally tells not only to the Brazilian public, but also to readers from other countries, who was Johann Natterer. Until now, if you searched for him in Portuguese, his name appeared only as an ornithologist (another important facet of this great man). There were no traces of his memory in any Brazilian museum dedicated to the Amazon. At the Goeldi museum, for example, Natterer was a complete stranger.

I would like very much to see an exhibition with the large amount of material collected by Natterer in the country of origin of these precious pieces. When I was Ambassador in Brazil, from 2012 to 2016, we made a great effort to accomplish this task, but unfortunately the dream has not yet come true. Other beautiful exhibitions were made about D. Leopoldina, the young woman who gave birth to the Austrian scientific expedition. They were well-deserved tributes to this woman who became – perhaps – the first „Brazilian“ in history, and who had the courage to motivate her spouse to remain in the new tropical homeland as emperor.

But it is never too late. Today, after the museums throughout history have suffered fires, such as the Brasilianum Museum in Vienna, the Museu Bocage in Lisbon and the Museu Nacional – not extending the list to other countries – what remains of Johann Natterer's collections is even more relevant, since in them Brazil's memory is very well preserved.

I would like to take the opportunity to express my deep gratitude to Pedro Mariani deeply, to whom I had the pleasure of proposing the partnership for this publication, who not only transformed our dream into reality, but also supported and participated actively in this achievement.

I hope that this book will be the beginning of a new and ambitious project that aims to bring the collection of Natterer – and also of other naturalists who came accompanying D. Leopoldina – to Brazil. Perhaps this is the precise moment – when the world is awakening to the importance of the Amazon for world climate, and also on the importance of the biodiversity of the rainforest and its still unimaginable uses – to call attention and show the love of an Austrian, born and raised in Tyrol in the early 19th century, for this emblematic region.

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THOMAS ENDER
Frigates Austria and Augusta.
Water colored pencil. 200x277mm.
K. AKAD

THOMAS ENDER
Music on the bow of the frigate
Austria, drawn during the crossing
in 1817.
Water colored pencil. 437x400mm.
This drawing is also dedicated to life
and work aboard the frigate and shows
the crew in a rehearsal for a party.
K. AKAD



THOMAS ENDER
Dancing sailors aboard the frigate
Austria.
Pencil, partially Water colored,
200x284mm.
K. AKAD

November 5, 1817

The Austrian frigate *Augusta* docks in Rio de Janeiro's harbor. It had hoisted sail from Trieste seven months before. Cannon shots announce the arrival of the small fleet, headed by the long-expected Portuguese vessel, *D. João VI* that conveys a very special passenger – the archduchess Leopoldina – whose rites of betrothal with D. Pedro had been held in Vienna by proxy in May of the same year. The event would be celebrated for many days throughout Brazil. Another Austrian frigate that convoys them – the *Austria* – had already moored on June 14 of the same year. Onboard of the *Augusta*, Johann Baptist Natterer was arriving, the lead role of the greatest German scientific entrepreneurship in 1800's Brazil: the Austrian scientific expedition.

Comprised of 14 members, the expedition had, among other purposes, to expand the scientific knowledge of the Austrian empire in the largest South American country. To Natterer, the journey was his most important scientific accomplishment – and the longest one in a foreign country – of his entire life. The naturalist spent 18 years in Brazil. The expedition, in which he had initially participated as a zoologist, was envisaged, organized, and implemented on the occasion of the royal wedding between the Austrian archduchess and the crown prince of Portugal. The dynastic union was one of the results of the Vienna Congress, which happened in 1815, after the end of the Napoleonic wars.





Leopoldina Archduchess of Austria,
Royal Princess of the United
Kingdom Portugal, Brazil and the
Algarve, Duchess of Bragança.

JEAN-BAPTISTE DEBRET.
Arrival of archduchess Leopoldina
In Rio de Janeiro in 1817.
Colorful lithograph of Thierry second
drawing by Jean-Baptiste Debret of
Voyage pittoresque et historique au
Brésil, Paris, 1834-1839.

Wars and escape to Brazil

Examining all the history of the first decades of the 19th century is to revisit events that have radically changed the world. Military invasions, international peace treaties, alliances among powerful nations, conquests and regain of large territories are just a few aspects, which exemplify these changes. It was an age of revolutions, and not even Brazil went out intact of its consequences. The revolutionary winds in France of 1789 and its subsequent unfoldment had also altered history's destiny.

French changemakers' forces overthrew a system that once seemed permanent. The nearby monarchies tried to interrupt the events in that nation, engaging in reestablishing the king's power. Conflicts quickly developed into wars between French and Germans and reciprocal interventions were made, in such a manner that a Republic arose. The conflict between France and its neighboring countries has only intensified since the time of its occurrence. French army took over military prominence and a young Corsican officer started his journey to power. After a coup that took place on 18 of Brumaire^{TN}, 1799 (according to the new Republican calendar), Napoleon clasp much power in his hands as consul of France. The Consulate period remained until 1804, when Napoleon's military control created a new Empire and crowned himself the French Emperor. In his administration, problems that seemed to be insoluble, were solved as if by a miracle. In a small amount of time, Napoleon established a Civil code in France, a composition agreement with the Church and a National Bank, consolidating the bourgeoisie power. At the same time, the Emperor got engaged in conflict with neighboring countries in Europe. Napoleonic invasions caused drastic changes in the geopolitical configuration of the European territory, with empires dissolution and reconfiguration of geopolitical boundaries, including annexations to French territory.

Unsatisfied with French actions, other European nations allied against Napoleon's onslaughts, attempting to contain French forces and ideas that were rapidly spreading across Europe. Nevertheless, France's military power defeated its opponents in different battles between 1805 and 1807. During those years of war, an essential conflict had developed between England and France, which mainly contended for control of European and colonial overseas markets. England had long established itself as a maritime power, so that it would be difficult to Napoleon to defeat it in open battle. To solve the dilemma, the French emperor decreed the Continental Blockade in 1806, ordering a large-scale embargo of all European ports for trade with England in order to weaken its economy.

It was crucial that all European coastline countries adhered to the blockade, but this strategy could not be carried out. Portugal resisted Napoleon's orders because of his long commercial submission to England. D. João, Portuguese regent at the time, was under pressure to take action against French invasion threats and for old English agreements. The imminent arrival of the French troops to Portugal, already crossing its borders, pressures D. João to make a decision, which would be unprecedented in the history of European aristocracies: in 1808, in a hurry, the Lisbon court boarded to Brazil, protected by English naval support.

This D. João's political maneuver was not an abrupt idea emerging exclusively from the immediate French threats. The European continent had gone through repeated political complications and military conflicts, since the French Revolution in 1789. Amidst European's powers, Portugal showed itself as a fragile state; in this context, the Portuguese statesman had been daily discussing the court's transfer plan. When the imminent French arrival ambushed the Portuguese, it became indispensable to proceed and handle the preparations for moving to Brazil.

^{TN} Translator's Note: *Brumaire* was the second month in the French Republican Calendar. It started between October 22 and October 24.



The Austrian Chancellor Prince of Metternich. Lithograph of Josef Kriehuber according to Th. Lawrence
NHMW

While the royal Portuguese family ventured toward its colony, the metropolis became hostage to the whims of foreign occupation. Regent D. João's decision to move to Brazil radically changed the fate of both countries, since the Portuguese court's regress to Europe would not happen any soon. An English delegation participation had been responsible for the powers in the metropolis, strengthening England's commercial and strategic interests. English's increasing participation in the Portuguese market was deepening progressively Portugal's submission. These benefits improved even more when D. João, still in Bahia, promoted the Brazilian ports aperture in 1808, granting England almost exclusive access, since all the other European countries were still subject to Napoleon's blockade.

At that moment France started to suffer the consequences of its own measure. Without having a way to supply the open demand by the continental blockade, the interdiction managed by Napoleon weakened his own country. The long years of war also wore out the French, especially because of England's, Prussia's, Austria's and Russia's resistance. The situation worsened when Russia decided in 1812 to break the continental blockade and go to war against France another time. By this time the French troops could no longer defeat their enemies, and Napoleon suffered successive defeats in the following years. Ruined, the emperor finally resigned his throne in 1814 and was sent into exile in Elba.

The winners reestablished the Bourbon dynasty in France and led Louis XVIII to the French throne. At the same time the Allied countries decided to meet at the Vienna Congress to reorganize Europe in the pre-revolutionary pattern. The event suffered an intervention when Napoleon escaped from exile in 1815 and reestablish himself as emperor. Once again, the allied countries got together to defeat him months later in Belgium at the Battle of Waterloo. This was Napoleon's last battle, totally defeated and exiled on the St. Helena island, where he would remain until his death in 1821. The Bourbon dynasty was once again brought to power in France. With that, European countries resumed their peace negotiations at the Vienna Congress, which lasted until 1815. Austrian Chancellor Clemens Wenzel Lothar von Metternich led the work, which the goal was to reconfigure European borders, establish a peace treaty, and restore absolutist order, bringing the continent back to the 18th century before disturbance.

While Europe struggled to reestablish itself, the Portuguese court was still in Brazil and didn't show any desires of returning. The transfer of the royal family transformed the relations between metropolis and colony and establishing Rio de Janeiro as the government's headquarters. In America, D. João created an administrative apparatus based on what already existed in Portugal, with the establishment of science schools, the Régia Press, Banco do Brasil, and other strategic bureaucratic institutions, which created great development to political and economic growth to the new headquarters of the metropolis. Nevertheless, after six years in Brazil, D. João was in a delicate position. There were no more excuses to stay away from Portugal, and from inside and outside the country there was enormous pressure on him to return. Without intending to give in to English demands, still in 1815 D. João decided to elevate Brazil to the condition of United Kingdom of Portugal, Brazil and the Algarve, formalizing the category in which Brazil was internationally graduated by the nations' representatives in the Congress of Vienna.

The European countries peace meeting became also an opportunity for D. João to consolidate the strategy of neutralization of English domination. Over the negotiations, Portugal invested in a political alliance with one of the continent's most powerful empires at that time: Austria. Negotiations began in 1816 and included a large state business: the wedding between the heirs of the Bragança's and the Habsburg's houses. The approach was beneficial to both countries not only for Portuguese motives. Clemens von Metternich saw in it an opportunity to increase industrial and commercial exchange between the two kingdoms¹, as well as strengthening the Portuguese monarchy.

¹ LUSTOSA, Isabel. *D. Pedro I: um herói sem nenhum caráter*. São Paulo: Companhia das Letras, 2006, p. 77.





LUKAS BETZIC
Travel route, *Map of Brazil with the indication of the journeys of imperial naturalists Johann Natterer and Johann Emanuel Pohl*, colorful lithograph by hand. Natterer's travel route is marked in red.
NHMW



D. Pedro's Box
Gift from D. Pedro to
his father-in-law, Emperor Francis I.
NHMW

JEAN-BAPTISTE DEBRET
King d. João VI and Emperor d. Pedro I.
Colorful lithograph of Thierry according to a
drawing by Jean-Baptiste Debret.
Voyage pittoresque et historique au Brésil,
Paris, 1834-1839.

Ties between Brazil and Austria

Dynastic marriage as a way of establishing political alliances has already been a long Habsburg's political tradition of which the Archduchess was aware. Carolina Josefa Leopoldina of Habsburg-Lorraine, daughter of Austria's Emperor Francis I and Empress Maria Tereza, was born in November 1797 in the bosom of one of the most powerful dynasties in Europe and lived her childhood and adolescence in a time of profound political structural changes. However, she had little contact with external events and, like her brothers and sisters, was accustomed to court ceremonial and was brought up under the obligations of an Emperor Habsburg's daughter: she was trained for her future role as wife and a God-fearing mother. Her education included reading, writing, mathematics, German, French, Italian, history, geography, music, literature, physics, Latin, singing, and female works, as well as natural science of which she was very interested in, especially mineralogy, zoology, and botany. In a letter to her sister Maria Luisa, while reporting on a visit to a mineral office in Prague, the archduchess wrote that "she could spend the whole day inside the office without eating anything."² Leopoldina even considered being a court mineralogist if they did not find her a husband. However, that was not necessary.

With the political negotiations between Portugal and Austria and the marriage agreement, Leopoldina started her Portuguese language studies as well as history of Brazil and Portugal. Such was her commitment in preparing for her marriage that she reorganized her mineralogical collection and wrote a French catalog according to the Haug's method of classification³, after receiving the false information that her husband-to-be was also a mineralogist. Such attitudes demonstrated both Leopoldina's dedication to her future performance as a wife and member of the Bragança's and her devotion to natural history.

Indeed, the archduchess was not only interested in scientific studies and practices. When the wedding negotiations began, Emperor Francis I had already in mind the assemble of a scientific expedition with the goal of collecting objects that would enrich his Imperial and Royal Cabinet of Natural Objects. From the nineteenth century on, sciences became professionalized, beginning to use new methods and practices. In this context scientific journeys began to require new planning, determined by use of specific equipment and instructions from university professors. They demanded the creation of institutional structures that upheld them, like museums and scientific societies. These trips gained new dimensions as a means of communication and knowledge acquisition, because it has become a means of data collecting and providing materials for natural history research.

On the other hand, besides scientific objectives the Brazilian expedition would also be helpful to interests of another nature. Through the scientific expedition in Brazil, Vienna would be able to broaden its knowledge of the territory and natural resources of the South American country, which were still very superficial and by that, it would bring this knowledge into the realm of the Austrian state's economic and political interests. due to all these reasons, the Austrian court took advantage of this marriage opportunity to put in operation its plans of materializing it.



Maria Teresa, second wife of Emperor Francis I, Leopoldina's Mother. Karl Hermann dotted engraving Pfeifer according to a painting of Josef Kreuzinger.

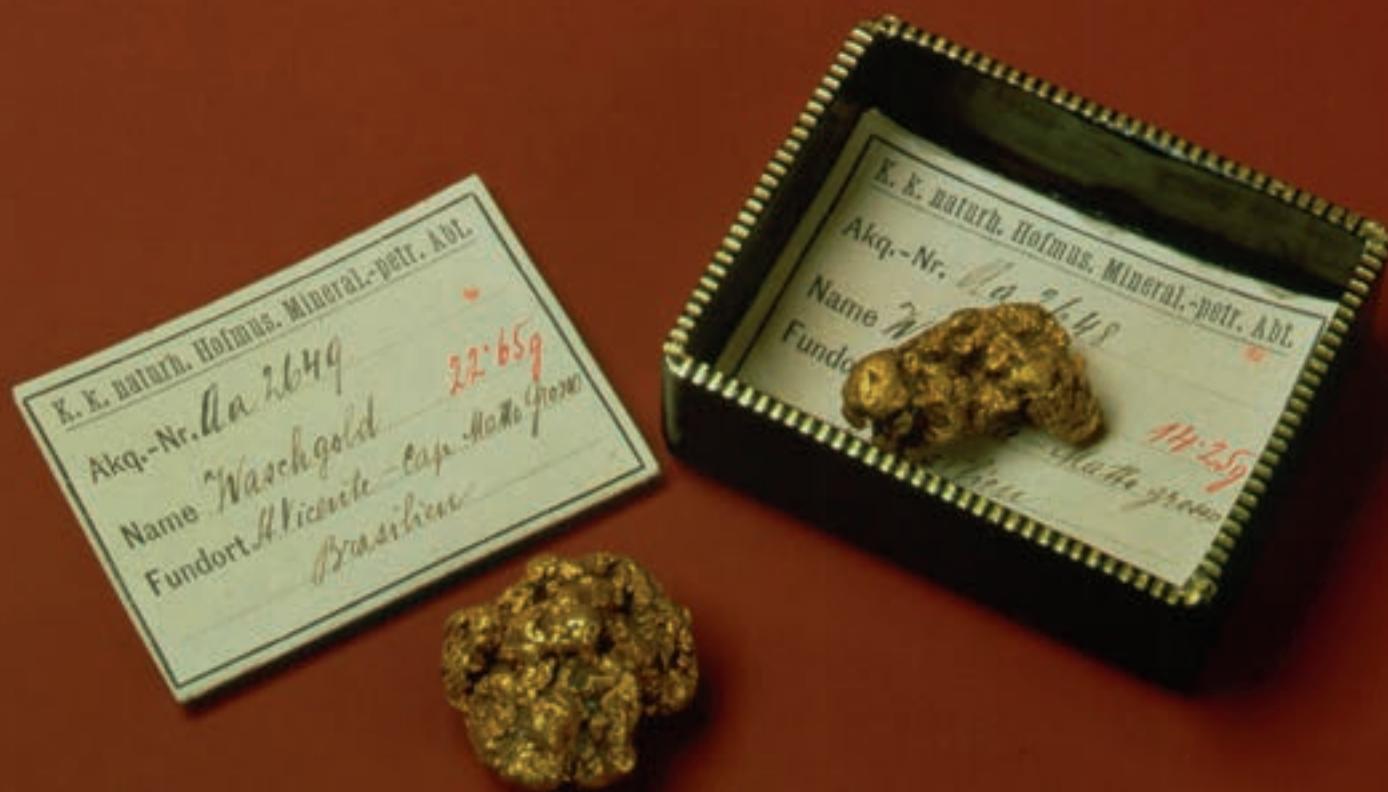
Washed gold (waschgold) of S. Vicente Mato Grosso, sent to Vienna by Natterer. NHMW

² Letter from Leopoldina to Maria Luísa, Prague, May 1810, in: KANN, Bettina, LIMA, Patrícia de Souza (org.). *D. Leopoldina: cartas de uma imperatriz*. Translated by Guilherme João de F. Teixeira and Tereza Maria S. de Castro. São Paulo: Estação Liberdade, 2006, p. 183.

³ Letter from Leopoldina to Maria Luísa, Vienna, November 21st 1816, in: KANN, Bettina, LIMA, Patrícia de Souza (org.). *D. Leopoldina: cartas de uma imperatriz*. Translated by Guilherme João de F. Teixeira and Tereza Maria S. de Castro. São Paulo: Estação Liberdade, 2006, p. 261.

“I confess that the sacrifice that I have to make living my Family, who knows? Maybe forever, will be very painful to me; but this alliance gives much joy to my father; separating myself from him will give me the consolation of knowing that I have accommodated myself to his expectations, being convinced that Providence guides, in a very particular way, the destiny of our princesses and that he who submits to his parents obeys Providence’s will.

(letter of Leopoldina to his aunt Maria Amelia on December 10, 1816)



Austrian scientific expedition

The marriage contract between D. Pedro and Leopoldina had been concluded and signed in November 1816. Soon after the wedding, which was celebrated in May of the following year, preparations for the expedition began. Austrian Chancellor Metternich, who was himself very interested in natural sciences, assumed control of the project's general direction. The scientific direction became Karl von Schreibers' responsibility (1775-1852), who had been the Imperial and Royal Cabinet of Natural Objects' director in Vienna since 1806. One of his missions was to choose the team of scientists and assistants. Schreibers suggested the names of zoologist Johann Natterer (1787-1843), botanist Heinrich Wilhelm Schott (1794-1865), and Dominik Sochor (?-1826) hunter and preparer of taxonomic objects.

Initially appointed by Metternich and Schreibers to head the expedition in Brazil, Natterer collided with the emperor's will. Baron Andreas von Stift, the emperor's private physician and state counselor, pleaded on behalf of Johann Christian Mikan (1769-1844), professor of natural history at the University of Prague, persuading Francis I to nominate him as chief of the scientific team. The emperor agreed, possibly on the basis of a hierarchical circumstance: because Natterer was not a university professor, he could not assume a higher position than Mikan's. The emperor's decision created a great discomfort for Natterer, who wrote to Metternich communicating his displeasure for noticing in that appointment a gesture of distrust of himself and his knowledge. According to the writer, Mikan was not used to the practical collector's tasks; he was an academic, and also a foreigner, thus he thought it was sad having to submit to him and to think that the academic could one day reap the reward of Natterer's merits⁴. The zoologist also wrote to the emperor himself, stating basically the same arguments, and concluding that Mikan would not be a suitable name for the expedition's administration because he had no field of experience with travel practice. In the note Natterer reaffirms his work as a zoologist in the Cabinet and his experience in traveling and dealing with collections⁵.

Despite insisting on his skills and abilities, Natterer's efforts were in vain. Emperor Francis I did not waive Mikan's appointment as head of the expedition and finished the controversy declaring that the relationship between the two was determined by their individual work as well as by the scientific matters entrusted to them⁶. Both would be responsible for their respective areas of work, so Mikan would be responsible for botany, with Schott as assistant, and Natterer for zoology, with Sochor as hunting assistant.

Other explorers were appointed for the Brazil's trip: Johann Baptist Emanuel Pohl (1782-1834) appointed as mineralogist, also Thomas Ender (1793-1875) and Johann Buchberger (?-1821), respectively as landscape painter and botanical specimen painter. Leopoldina herself also appointed Rochus Schüch (1788-1844), her mineralogy professor, Johann Kammerlacher, physician and ornithologist, G. K. Frick and Franz Josef Frühbeck (1795-?) who was a painter and appointed as Schüch's assistant.

Not only was the Austrian empire interested in fostering knowledge of natural history, but also the king of Bavaria Maximilian I desired to stimulate science in his territories. At his request, joined the endeavor Bavarian zoologist Johann Baptist von Spix (1781-1826), physician/botanist Carl Philipp Friedrich von Martius (1794-1868). Grand Duke Fernando de Toscana also appointed botanist Joseph Raddi (1770-1829). With these names the list of 14 members of the scientific trip to Brazil is complete.



KARL JOSEPH ALOYS AGRICOLA,
Karl Joseph Aloys Agricultural, based
on a painting by Johann Peter Krafft,
Emperor Francis I/II, lithograph,
Vienna, 1828.
NHMW

⁴ Letter from Johann Natterer to Clemens von Metternich, Vienna, December 27, 1816.

⁵ Johann Natterer's Letter to Francis I, Vienna, December 27, 1816.

⁶ Instruction to Karl von Schreibers, January 29, 1817. SCHMUTZER, Kurt. *Der Liebe zur Naturgeschichte halber: Johann Natterers Reisen in Brasilien 1817-1835*. Wien: Verlag der Österreichischen Akademie der Wissenschaften, 2011, p. 26.

(...)

“And if, besides that, I feel proud of having the knowledge of how collections of natural history are made and have already proven it, it would be sad that I would have to submit to a foreign teacher of whom I am not convinced that he will someday reap the reward for the merits I sow. I therefore beseech for this, that Your Highness intercede benevolently so that this expedition may be split into two parts.”

(letter from Johann Natterer to Clemens Wenzel Lothar von Metternich, Vienna, 27 December 1816)

“The relationship between Mr. Mikan and Natterer establish itself by the natural consideration of their work categories, as well as by the scientific subjects entrusted to them. ... Professor Mikan is in a more advanced position than Mr. Natterer; however, this position cannot exercise direct influence on the scientific branches which they are entrusted – especially of one another.”

*(Instruction to Karl von Schreibers in SCHMUTZER, K. *Der Liebe zur Naturgeschichte halber*. Wien: Verlag der Österreichischen Akademie der Wissenschaften, 2011, p. 26)*

The explorers in the service of the Imperial Royal Office of Natural Objects in Vienna were under the authority of Karl von Schreibers, the trip's scientific director. The project was an opportunity for the scientific practices of these travelers to furnish the study and knowledge of a large and remarkable part of the planet and enriched all sciences and institutions of the monarchy with their collections. Until the time of the expedition, Brazil had been little explored by European scientists. With this expedition Austria could expand its collections and open new research fields. To achieve these objectives, members should follow two basic Schreibers' instructions: to collect plants, animals, seeds, fruits, and to describe them scientifically. For this purpose, naturalists were instructed not to remain at the same place for long time, since the main objective consisted on obtaining an overview of the Brazilian species, not of their details.

The importance given to the expedition was so that it had an annual budget of 40,000 guilders – a large sum at the time – besides other disbursements allocated for the collection and transport of live animals. Each participant received a salary as well, according to their duty; and the expenses with the material sent to Brazil for the naturalists to use were considerable: 5,097 guilders.

In order to get to America, they prepared two frigates: the *Austria*, in which Mikan and his wife would travel, also onboard Thomas Ender, Spix, and Martius. Natterer, Schott, and Sochor boarded the *Augusta*. The other participants traveled from Livorno on the Portuguese vessels *São Sebastião* and *D. João VI* - the latter carried Leopoldina.

After docking in Rio de Janeiro, the naturalists finally began their work. They initially covered the city's vicinities and then, from 1818, performed long journeys to more distant places, now divided into groups.

As a result of several personal circumstances some expeditionists returned as early as 1818 to their homeland. Yet, three years later it was political circumstances that caused the Austrian government to order the return of the entire team to Europe. Vienna demanded to finish the expedition in 1821. However, the enterprise had continued for about 14 years. One of its members hesitate to return to his homeland. Contrary to and negotiating the orders issued by Austria to finish the trip, Johann Natterer managed to circumvent the adversities and arranged to remain in Brazil until 1835. His determination and firmness of purpose resulted in outstanding collections that even today have insurmountable scientific value for numerous fields of knowledge.

A pair of earrings (*atu-Bulinia*).

Bororo da Campanha (Biriboncne),
Paraguay River, Mato Grosso, Brazil,
circa 1825.

12 and 13 rings of tucum^{TN}, respectively,
pendants of shells, feathers, plant fibers,
cotton, resin, about 5.5 to 5.9 cm.

Natterer Collection

Johann Natterer features these extremely elaborate earrings, made by men, destined as embellishment exclusively for "grown girls". The eventual symbolic meaning of the hands was not discovered. (CF)
Weltmuseum Wien

Showcase VI of the Imperial House exhibition.

Objects of the Paresi (paress) and Cariuna, circa 1840.

Watercolor.

Weltmuseum Wien





HEINRICH WILHELM SCHOTT
Johann Oberer
Anthurium affine S[chott]
gouache, n.d.
NHMW

HEINRICH WILHELM SCHOTT
Wenzel Liepoldt,
Caladium asperulum,
gouache, n.d.
NHMW

JOHN. HEER, PALAT. VINDOB
SCOTT ANTIQUE 1561



Caladium asperulum L.

Liquid pica

Life path of a naturalist

Johann Baptist Natterer was born in Laxenburg in 1787. A child of Joseph Natterer Sr. and Maria Anna Theresia Schober. He had a brother named Joseph Natterer. His father was Emperor Francis I's falconer at the imperial residence in Laxenburg, and a collector of insects, birds, and mammals; the latter he himself stuffed. Francis I, interested in the natural sciences, closed the falconry in 1793, bought Joseph Natterer's entire collection, and hired him to work at his Natural Objects Office in Vienna. The Natterers then moved to the empire's capital, where later the couple's two sons followed in their father's footsteps, working in the Cabinet. In 1801 Joseph Natterer assumed the role of volunteer helper. Five years later, Karl von Schreibers, institution's director, appointed Joseph Natterer Sr. as first inspector of the zoology department. From then on, his son Joseph became responsible for the bird and mammal collections.

In 1794, before starting his scientific practice with his father, Johann Natterer had studied at the Normal School of Piarists in Vienna, where he also attended the *Gymnasium*⁷. But Natterer did not finish his regular studies. They were interrupted by the collection trips that young Natterer had begun to carry out with no compensation through the lands of the Austrian empire. His first trip took place in 1804, when he was 17, at the time he accompanied his father to regions of nowaday Hungary. Father and son researched the swamps on Lake Neusiedl, near Pamaggen, Wallern, and Antau, passing through the Tisza River until they reached the Banat region. The following year Natterer again traveled twice to Neusiedl, but this time alone.

Between 1806 and 1808, Natterer made several trips to European territories such as the Wechsel mountain range and what is now Croatia, being obliged by Karl von Schreibers to give detailed descriptions of all he obtained in his journeys. Natterer performed his job very well and has contributed several times to the Imperial Cabinet not only taking care of its archives; he also collected objects for the Cabinet and followed the deliveries of objects from other institutions. In 1808 Natterer was commissioned to go to Trieste in order to receive a shipment of natural history objects from Egypt. During the trip, he took the opportunity to collect fish and helminth. The following year, due to the effort and dedication demonstrated in this mission, the naturalist was hired to work in the Natural Objects Office as an unpaid intern. In the following years, he acquired extensive knowledge in open courses at the Royal Academy and the University of Vienna. He studied chemistry, botany, natural history, and anatomy. Besides, he took languages classes such as Italian, French, English, also philosophy and drawing. With all that, the young Natterer perfected abilities that, together with the experiences obtained in the previous trips, were of great value during his stay in Brazil.

Still in 1809, during the Napoleonic Wars, Natterer was appointed to safely take to Temesvár (today in present-day Romania) collections of museums, libraries, and of the treasury chamber, as well as other imperial collections. He took the opportunity while he was in town, to travel with hunter Dominik Sochor until the Ottoman border. After the peace treaty with France, the naturalist moved all those collections back to Vienna. The following year Natterer made a trip to Moravia, which scientific results earned him an acclaimed work on intestinal worms, published jointly with Karl von Schreibers and parasitologist and hygienist Johann Gottfried Bremser.

JOHANN BAPTIST NATTERER
Vista lateral de um piau,
Leporinus fasciatus
(Characiformes, Anostomidae).
Dorsal 10, caudal 19, anal 9,
ventral 11, pleitoral 15, nº 110.
[Vila Bela do] Mato Grosso,
14 de outubro de 1828.
NHMW

⁷ Which is equivalent to the old high school and enables entry into higher education.

Conscious of his contribution and desiring to continue his career in the scientific field, Natterer wrote a letter to the Austrian Archduke Johann Sebastian, who in 1811 had created the Joanneum Museum, a center for scientific research and education. Natterer's objective was to get a job as a conservation worker, a position he had not obtained in the Office of Natural Objects Cabinet. In the letter Natterer explains how he had followed his father's professional path, how he had become affectionate in natural history, devoted to it learning the knowledge necessary for a naturalist. He had studied zoology, a little mineralogy and botany; knew foreign languages; he had learned from his father how to stuff animals; He knew how to properly draw and collect animals, even intestinal worms. He also had lengthy experience with the scientific trips made by the Office of Natural Objects. Through its activities, it had enriched the Imperial Cabinet with many animal species, including rare and new ones. Although he considered his position in the Cabinet good and permanent, the letter composer writes that it would not be possible that three people of the same family held the same position at the institution simultaneously. Thus, he requests the archduke to consider the possibility of granting him a position at Joanneum. However, despite this request there hasn't been kept any record that Natterer actually worked in this museum.



In the following years the naturalist continued his activities as a collecting traveler. In 1812 he traveled throughout Italy with his father's encouragement, where he covered southern Calabria. In 1813 once again he was responsible for transporting the emperor's collections, this time to Fischamend, and performed for security reasons due to the wars against Napoleon. In 1814 a new trip took him to Trieste, where he fetched for the emperor animals from the Tripoli Bay. In 1815, when the war conflicts finally ended, the naturalist traveled to Paris on Schreibers' command to bring back to Vienna the artistic and scientific objects that had been taken by Napoleon. Natterer obtained great experience with these trips. For his dedication to imperial collections, the following year he was finally nominated assistant supervisor of the Imperial and Royal Natural Objects Office of Vienna, this time he earned a normal salary.

In 1816, when the idea of a scientific trip to Brazil shifted from the condition of mere cogitation to become concrete planning, Natterer was faced with a great opportunity, when he was invited to join the endeavor. The South American country was at that time still little known by Europeans. The lack of information about its territory and its peoples had also made it a very distant place in the Austrian imagination. For many years the Portuguese court had forbidden foreigners from entering its American colony, keeping it for centuries as unknown land. With the coming of the royal Portuguese family to Brazil and the opening of Brazilian ports in 1808, much of the restrictions on foreigners' trips were lifted. After these events, many Europeans were able to come and explore Brazil over the years, some even hired by D. João himself like the group of French artists formed by Nicolas-Antoine Taunay, Auguste-Marie Taunay, Jean-Baptiste Debret, Grandjean Montigny, and Simon Pradier, who handled the artistic representation of the new reality of the Portuguese court. The Austrian expedition was in this sense, an unprecedented and extraordinary opportunity opened to the science world by the new relations established between Portugal and Austria.

After preparations for the beginning of the expedition, its participants were divided into two frigates, which departed from the port of Trieste on April 10, 1817. Leopoldina's entourage would follow later after the wedding by proxy happened. Natterer boarded the frigate called *Augusta*, as did Sochor and Schott. The space on the ship was very tight, leaving little room for travelers. While Natterer and Schott had their own cabin, Sochor was unlucky. Natterer seemed to be pleased with his accommodation, where he could work, and he wished he would have a quiet and comfortable trip. However, the months of the Atlantic crossing would not be a calm and easy adventure.



Right in the first hours of the trip, the frigates faced a sea storm. It was not possible to anchor in Piran (today's Slovenia), and the ships had to proceed travel keeping close distance to each other so they would not get lost. However, right in the following night the *Augusta* lost sight of frigate *Austria* and was forced to continue the trip by itself. The storm's power had destroyed its masts and flooded the cabins, and the crew could barely stay standing. Natterer felt as if the ship would break apart any time. Then the frigate was able to dock in Rovinj (nowadays Croatia) for thirteen days, where some masts and sails were fixed, and then the frigate was Venice-bound. At Chiggoia's port they remained for a while in order to have necessary repairs. The frigate *Austria* had also suffered damage in the storm and had repairs in Pola (today in Croatia). On April 20, the *Austria* continued its journey to Brazil, passing through Gibraltar in May, from where it departed again in early June, to finally anchor in Rio de Janeiro on June 14. Meanwhile, the *Augusta* was so damaged that it needed more time for restoration. Repairs took several weeks, during which Natterer stayed most of the time in Venice, as he could not get around the ship with so many workers. But the time without traveling by sea was not unproductive, because he performed several collecting tours there. In the meantime, in an excursion with Sochor and Schott, he captured birds near the Brenta River.

On May 31, 1817 the *Augusta* could sail again, going to Gibraltar where it arrived on June 17. There they had to wait for the arrival of Archduchess Leopoldina, who, however, would only leave Livorno in August. Once again Natterer took advantage of the stop in Gibraltar to carry out scientific activities. Together with Sochor and Schott he made tours through the region into Algeciras, San Roque, Cabo Carnero, Tarifa, and Cape Trafalgar. At the end of the period, Natterer assembled two boxes addressed to Vienna containing 68 birds, 10 mammals, 77 amphibians, 24 vials of intestinal worms and 900 insects.

On September 1, 1817 the *Augusta* left from Gibraltar heading to Brazil, following the Portuguese ships *São Sebastião* and *D. João VI*, which were carrying Leopoldina and her entourage. The trip across the Atlantic lasted 2 months, and only in November they could see the Brazilian coast. On November 4, they passed through Cabo Frio, and the next day they arrived in Rio de Janeiro, at the Guanabara Bay's entryway, where Natterer would begin the greatest and longest voyage of his life.

[Panorama of the coast]
Coast in the Strait of Gibraltar.
Pencil and watercolor,
109x480mm.
K. ACAD





Tent with crew members in a dinghy
imperial and royal frigate *Austria*.
Pencil, 200x265mm.

To protect oneself from the sun aboard the *Austria*, tarps were extended forming tents. The small group of people is often characterized as the "wise men aboard the *Austria*". They are, actually, the members of the Austrian legation, who left before the archduchess Leopoldina, to receive her in Rio de Janeiro January. Namely, Baron von Hügel, the secretaries Schönfeld and Palffy, as well as Cadet Mendorf.

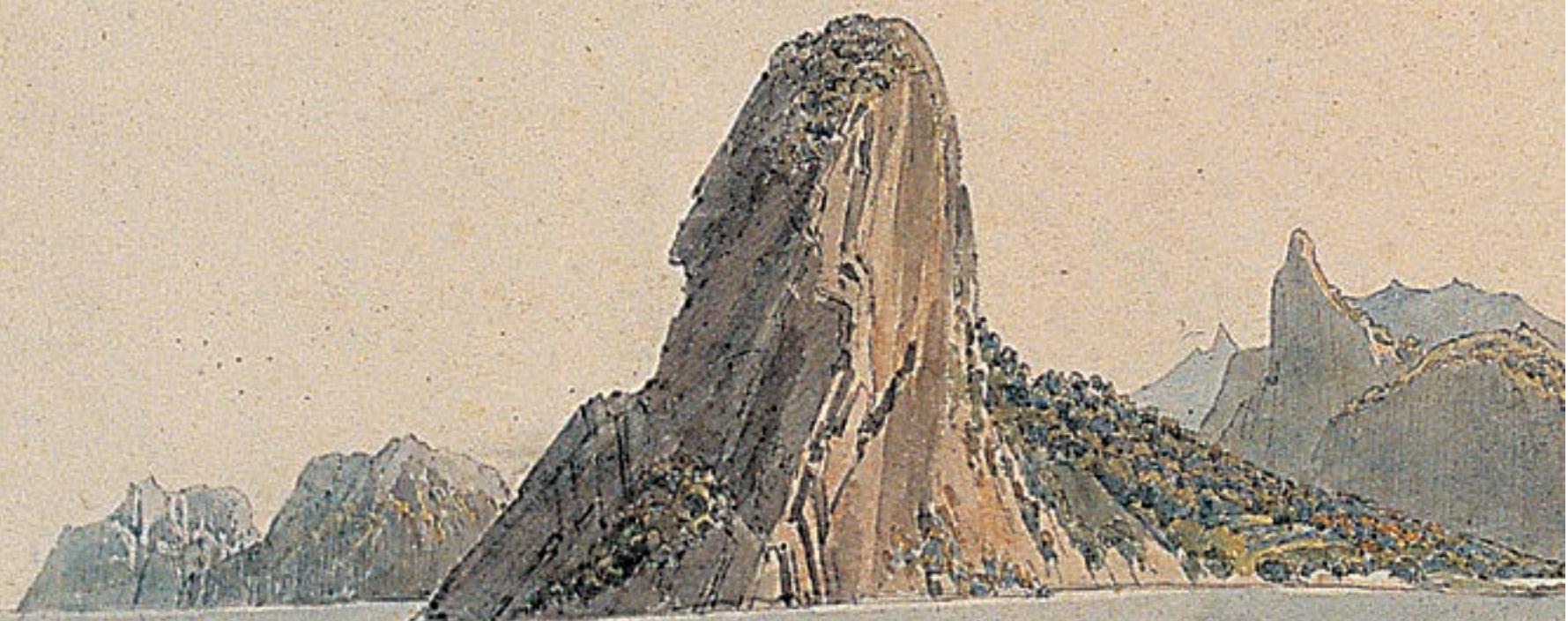
K. ACAD

THOMAS ENDER
The frigate *Augusta* during a Storm.
Pencil and watercolor, 192x258mm.
K. ACAD

“Early on the 11th an intense storm fell; at 11 AM we had lost all the masts. The swing and noise of the ship were terrible. The sea flooded the ship at the helm and flooded all the cabins. Anything that was not tied to the ship fell with a terrible crash. Chairs, tables, shotguns, bottles, glasses - all of these marched from one cabin to another on the deck, where the official boxes were. No one could stand without holding onto something. All the time the ship seemed to be ready to break in two. The storm lasted until the end of the day. At night everyone was jubilant to be able to find an anchorage, and the anchor was dropped to a depth of 25 fathoms. The danger of being thrown offshore was gone, but there was still a very busy night. Despite the intense ship rocking I did not disgorge, but Schott did, and he remained ill the next day too. Sochor was probably sick, but without vomiting. The dog was very afraid and hid in my bed where he stayed for a day and a night. I also stayed in bed most of the time” (*letter from Johann Natterer to Joseph Natterer, Chioggia, April 15, 1817*).

K. ALAD.





THOMAS ENDER
Sugarloaf at the port entrance
of Rio de Janeiro.
Watercolor, pencil. 283x465mm.
The watercolor designed by Ender, still
in the ship, shows the entrance to
Guanabara Bay and the port of Rio
de Janeiro with Sugarloaf Mountain,
395 meters high, the Praia de Fora and
the Fortaleza de São João in the narrowest
part from the port entrance. On the left is
the Leme Hill, behind which is hidden
Copacabana beach. In the background,
the Corcovado.
K. ACAD



Voyages through Brazil

Natterer's journey through Brazil lasted eighteen years, during that time he had been to numerous regions little known at the time by the authorities. Nevertheless, not always he could travel where he wanted. His plans suffered constant changes, which his letters reported to Austria and the fragments of his journals told. The chronology we present here follows Natterer's own description, detailed in the reports regularly sent to his Austrian superiors. His pathway can be subdivided into ten steps, in which the numerous displacements make up a similar defined phase, which we call here "journeys". In this perspective, the naturalist made journeys throughout Brazil.



Spear with Rattle.

Tukano, Uaupés River, Brazil, circa 1830. Feathers, raffia, resin tree, length 265 cm.

Natterer collection

In the Tukano mythology, the earth lies on two spears with crossed rattling, which serve it as support. The jagged tip represents the cigar-holder, which in the Tukano's myth of the creation played an essential role in the creation of man. Below can be found two oval circles representing the sun and the moon. Observed from the side, it can be identified immediately in the form of pots holder. Each part of the spear with rattle incorporates a sphere of the universe. The lower part, in which the rattle is also found, represents the sphere of human beings. In Natterer's times, the spear with Rattle was also a weapon of war, as it can be recognized at the bone tip: there are still remnants of the curare, poison used for arrows that has a paralyzing action on the musculature and thus leads to death by respiratory arrest. (BC)

Weltmuseum Wien

GEORGE MILEK

Updated ten way map Johann Natterer's Travels through Brazil, 1817-1835.



First journey: November 5, 1817 to November 1, 1818

Early in the morning on November 4, 1817, Natterer was glad to see what seemed to be Cabo Frio. The frigates Austria and D. João VI raised their royal flags and gun saluted the coast to warn the capital of their imminent arrival. navigation was sluggish so they ported in Rio de Janeiro only the following day. It was a relief to finally reach the coast. The days at sea were stormy; they could barely open the cabin windows during their fleeting, which had caused them a sense of imprisonment. The amount of water that had entered the vessel along the way had ruined various equipment, disrupting working conditions aboard the frigates. For Natterer, the trip across the Atlantic had been terribly long.

On the 5th the frigate *Augusta* moored on Ilha das Cobras. After months of a turbulent crossing, the view of Rio's city entrance didn't impress Natterer. The mountains shapes seemed hideous to him. However, although he did not consider them beautiful, the naturalist recognized the opportunity to make fruitful collections on palm-filled islands with so many unknown birds flying over the frigates. But the yearning for new collections would have to wait a little. The frigates' arrival was relatively confusing, as all eyes were turned to the long-awaited Leopoldina. The streets and houses of the city were all decorated for the archduchess reception. Still on the very same day the king and queen, together with the princes, boarded the ship to welcome her. But only on the following day the archduchess went ashore and made her official entry into the capital. The day was allocated for the celebration of the royal wedding. The city was all adorned and well-ornamented carriages took the archduchess and the crown prince, as well as the ladies-in-waiting and even Austrian court ladies, to the wedding grounds. The streets were taken by the military, the people had decorated the front of their houses and windows with curtains and tapestries of different colors. Meanwhile, the naturalistic travelers also headed for the royal chapel. Along the way, they saw three arches of various forms with many inscriptions, with the couple's initials PC (Pedro and Carolina). After the ceremony, the royal couple made a quick appearance by the window, and the troops and the multitude shouted "hooray". At night their majesties went towards the royal palace of São Cristovão.

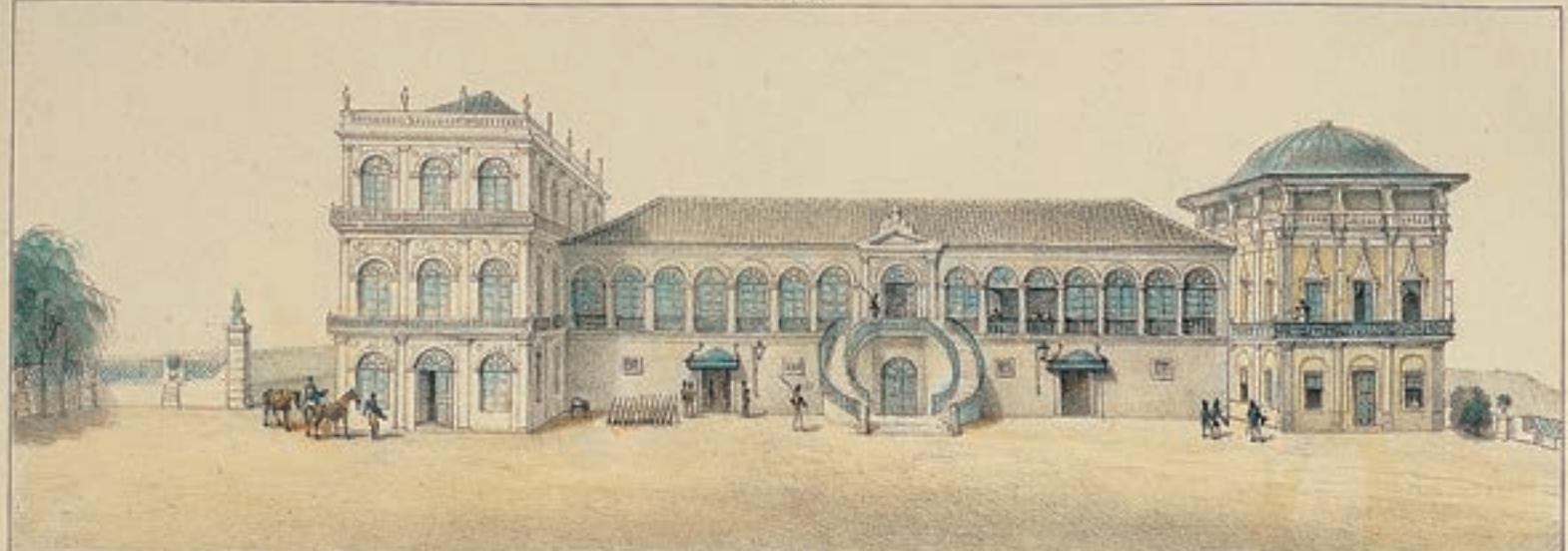
JEAN-BAPTISTE DEBRET

Progressive improvements of the *Palácio de São Cristóvão* (*Quinta da Boa Vista* 1808 until 1831).

Colorful lithograph of Thierry according to a drawing by Jean-Baptiste Debret.

Voyage pittoresque et historique au Brésil, Paris 1834-1839.

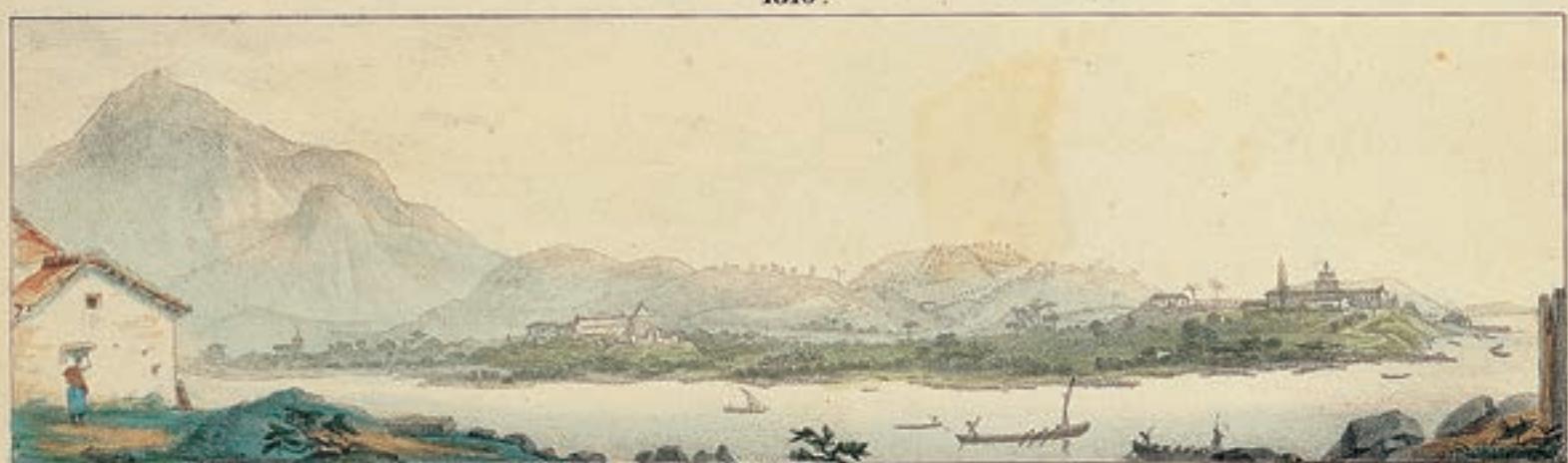
1831.



1822.



1816.



1808.



In the first days Natterer did not undertake any travel, restricting himself to look for other naturalist travelers and getting accommodation in the city. The empire's capital had become an entryway for several travelers, so those days would be a great opportunity for Natterer to meet other travelers, beside establishing contact with members of his own expedition who had already arrived. For the Austrian, the meetings were exclusively interesting because in them, he could observe the objects already collected and obtain information about the routes and travel logistics. The first visits were to Mikan and his wife, who had rented a house in Catumbi, and to Baron Georg von Langsdorff. The Bavarians Martius and Spix, who came to Brazil in the *Austria*, were already making their own scientific attempt independently of the Austrians. Their collection activities had already reached the mark of about one hundred birds, and the two soon planned a three-month trip to Vila Rica through São Paulo. Although with positive initial results, the pair already accused the effects of the strong heat and the difficulties in conducting the excursions. Spix confessed to Natterer that he would never have come to Brazil if he had known this before, and already expressed the desire to return to Europe. The Austrian, on the other hand, could not make such an assessment, as he had barely arrived in the country, and it was not so hot on this occasion. It was still in his first impressions of the city, which until that moment was not at all bad. However, Rio de Janeiro was not Vienna. D. João's own palace, compared to the palaces of the Austrian emperor, would have constituted in Natterer's eyes only an ordinary house.

The naturalist took days to find an accommodation. that's why at first, he could only make small expeditions, because it was necessary to return daily to the ship. His stay on the outskirts of Rio de Janeiro did not profit Natterer many collections. He hoped to make them in the future, since the frigates would only return to Europe in March of the following year. However, in December he wrote to his brother that he had already obtained over 90 birds, and that he would soon send them, because he wanted to impress the emperor.

As soon as all the Austrian expeditionists assembled, they decided to organize their tours in groups to reach further regions of the city. Initially Natterer wanted to go to Cabo Frio; but that was also Mikan's intention. So, Natterer made another decision, and decided that he would go towards the mountains. His first stop would be the Fazenda Mandioca, where Langsdorff resided; afterwards, he would go towards the Serra dos Órgãos, leaving from there he would go to Cantagalo. Pohl wanted to join him, but he also changed his mind. For logistical reasons, both Mikan and Langsdorff warned him that traveling in large groups was not possible as they would involve serious accommodation difficulties.

Cassava farm
Mr. v. Langsdorff's house,
watercolor on pencil 192x317mm.
Baron von Langsdorff's cottage
was also described in *Reise in Brasilien*
(Journey to Brazil), by Spix and Martius,
1823-1831.
K. ACAD





M. Mandie.



BENJAMIN MARY
View of Guanabara Bay,
from Viana Island.
At the base of inga tree, on
the right, you see a copy of
the species *Coussapoa schottii*.
Flora Brasiliensis, volume 1.



BENJAMIN MARY
Primary forest in Serra da Estrela,
near Petrópolis.
Flora Brasiliensis, volume 1.



Natterer expressed at the time his intention of going to Santa Cruz to meet Major Feldner, his acquaintance, because he believed that he would get many birds there. In May 1818 he moved toward that direction, and then undertook a brief foray into Ilha Grande. In a letter to Schreibers he describes his departure from Rio. His departure was delayed initially because of unstable weather, but then also because of a fisherman whom the naturalist had hired, and now refused to leave. The naturalist called the local police stewardship mentioning his friendship with Baron Langsdorff and Colonel Varnhagen, director of the Sorocaba iron factory in São Paulo. So, ordered by the law enforcement authorities, the fisherman "changed his mind," and they left from there on a starry night, past the forts of São João and Santa Cruz, and the Sugar Loaf. The next day they reached Barra de Guaratiba, and at night Sepetiba – their destination. There, Natterer was fortunate enough to find a suitable accommodation. He remained in the region for some time, considering the location favorable for capturing swamp birds, and he also explored with Sochor the western side of the region. In addition to birds, they managed to capture caimans. The stay in Sepetiba was an opportunity to meet Major Feldner, who lived in Santa Cruz, near that region.

Staying in Sepetiba also gave Natterer an amazing personal encounter with Crown Prince D. Pedro and Princess Leopoldina. João VI was at the time in Santa Cruz, where there was a royal palace. This was a place where the king could relax and enjoy country life. At Santa Cruz Palace, Natterer's presence in Sepetiba was already known, as he often visited Major Feldner. The news reached Leopoldina, who was also in the area. On a warm March day, after returning from his hunting trip, Natterer's servant ran to meet him with the announcement that the Crown Prince and Princess had just arrived. Quickly Natterer put himself together in order to receive the royal visits. He took them to the rooms where they could watch the birds collected by the naturalist. Dom Pedro became interested in the air rifle and shot some boards on the beach. The prince also wanted to shoot some birds, which made him very happy.

However, Natterer could not stay long in the Sepetiba region. He had to return after receiving a letter from Major Feldner warning of the frigates departure that brought the expeditionists to Rio de Janeiro. At the time Natterer was in Marambaia Island, and on April 28 he went back to Sepetiba to prepare the returning trip to Rio. While returning, the naturalist faced a rough sea and had to stay a few days at sea. When he arrived in Rio de Janeiro, the providential delay in the Augusta's departure, postponed to May 21, gave him the opportunity to give his crew the appropriate instructions for sending a shipment to Europe, where the frigate would return, and for boxes accommodation in this vessel containing collected objects. In this consignment he managed to send four boxes addressed to the emperor. The objects were the output of three months of travel, and Natterer hoped they would satisfy "His Majesty the Emperor".

MICHAEL SANDLER
A female jaguar, a gift from Leopoldina to the Schönbrunn Palace in 1819, where it arrived in 1822.
Lithograph.
NHMW

“It was March 5, on a very hot day. Not long ago I had returned from a hunting excursion, and had just lain down, quite exhausted from the scorching heat I had encountered on a sandy path, that’s when I heard a vehicle passing by. My servant came running with the news that it was the Crown Prince with the Crown Princess. I gathered myself quickly and hurried to receive the prominent visit. I then led both into my small, awful room, where I could barely turn, where they examined my collected birds. The Crown Prince, with whom I spoke in Portuguese, notably delighted with the air rifle. He expressed a desire to take a few shots. Now he wanted to shoot some birds from a nearby tree. (...) The princess asked her fiancé if he didn’t want a dog...”

(letter from Johann Natterer to Joseph Natterer, Rio de Janeiro, June / July 1818)



Jaguar. Maltesen, Zeichnung des Amerikanischen Leoparden. 1819 nach Natur gezeichnet
Skizze 1820

While writing to his brother in June 1818, Natterer commented on his frustrated travel plans. According to his previous projects, he should be on his way to Rio Grande do Sul, and he should also be organizing his trip to Mato Grosso. But that was not what happened. Tours into the interior of the country were under strict government restriction. No one knew exactly the reasons of this restriction. In the letter, Natterer presumes that the probable cause had been the passage of a group of French through Minas Gerais some months earlier. People told an anecdote that one of them would have suggested that they should fill their transport of diamonds to get rich faster. That was supposed to be just a joke, but another member had taken the statement seriously, and went to Rio de Janeiro to report them. Shortly after this news arrived, the government had immediately ordered to arrest them.

Nevertheless, even before this event the Brazilian government had already imposed restrictions on traveling to Minas Gerais region. The traveler named Sellow, a Prussian naturalist who had been in Brazil since 1814, though with some restrictions, had been granted permission to visit the region with a certain Dr. Olfers, secretary of the Prussian envoy – Count Fleming. Baron Neveu, Austria's commissioner of business affairs in Brazil, had to apply for authorization for Natterer and Pohl for the same purpose. However, considering the adverse situation, Neveu lost boldness and did not do it, preferring to avoid "receiving a negative answer". In the letter Natterer details to his brother the maneuvers that some people did to obtain such permission for visiting the diamond district. The Bavarians, Martius and Spix, who traveled under Austrian's protection, had already gone to the region, and to Natterer it would be a shame if the Austrians did not receive the same treatment. Affirmative responses to the Bavarians and Prussians made Natterer believe that Baron Neveu should insist on asking for permission.

Although Natterer showed his disapproval of the Brazilian government's attitude, he wrote to his brother that he did not intend to go to the diamond district, but to Rio Grande do Sul or Mato Grosso. It was his true wish, for then he could gather more animals and other objects. While staying in Rio, his collection didn't increase much. But his hopes of visiting the south seemed far from being fulfilled. His other option would be going to São Paulo. There he would meet Varnhagen, with whom he could obtain accommodation for some time, using it as a foothold for other activities in southwestern regions. The naturalist planned to navigate rivers and find some indigenous groups, such as the Caiapós, in the Urubu Punga waterfall region, and from there he would travel to Paraguay or Camapu. Another option would be going north through Goiás, reaching Piauí, or to the easternmost regions of the São Francisco River. Natterer's plans were to surpass the bordering provinces of Rio de Janeiro. To do so he made his preparations.

Topaz box with record form,
sent to Vienna by Natterer.
NHMW

“Count Fleming came to Brazil as the royal Prussian ambassador; while Mr. Olfers as his secretary. A journey to the interior of Brazil, especially to the diamond district, should definitely not be seen as the goal of his mission! Although he has the intention of making natural history collections, dr. Olfers was assigned to be at the embassy. He never presents himself as a naturalist, but always as a secretary. When an entire foreign embassy, which usually sits only at the court residence, wants to visit and investigate the heart of Brazil for several months, this does not necessarily arouse suspicion in a government that is extremely suspicious of any case!”

(Letter from Johann Natterer to Josef Natterer, Rio de Janeiro, June / July 1818).



MICHAEL SANDLER
To Johann Emanuel Pohl,
Ferdinandus aspeciosa,
drawing in India ink, after 1821.
NHW

MICHAEL SANDLER
Ferdinandus aspeciosa
In: *Plantarum Brasiliæ icones et
descriptiones hactenus ineditæ*, volume 2,
colorful lithography by hand, Vienna, 1831.
Collected by Johann Emanuel Pohl
and named after Crown Prince Ferdinand,
the future emperor.
NHW





Ferdinandusa speciosa.

Second journey: November 2, 1818 to March, 1820

Natterer's stay in Rio de Janeiro would be for a short time. He had made initial plans to travel to the provinces of Pará, Rio Grande do Sul, Rio Negro, Mato Grosso, and Minas Novas, but his visa applications had been initially denied for these regions. He was granted to travel to São Paulo, Goiás and Minas Gerais – except in the diamond region. In November 1818, Natterer and Sochor, accompanied by a 13-mules caravan, set out for São Paulo through the Serra do Mar, whose route led them through Santa Cruz, Itaguaí, Taubaté, São Jose dos Campos and Mogi das Cruzes. In a letter from January 1819, Natterer described the precarious situation he had encountered on the way to São Paulo from the ranches where they slept - "a brick or palm-leaf roof, or long-grass maintained by stake, open in directions" - which barely protected from the rains, the lack of food in the sales, where one could only find "cachaça"^{7N}, cassava flour or white cornmeal were found, sometimes a little bad sugar, black beans and almost always corn for animals as well⁸. In São Paulo they stayed at a colonel's country house located in Bom Jesus, in the suburbs of the city. When they arrived in the city of São Paulo, they both went to visit the iron ore and gold mines of the region. At the end of January 1819, they traveled together from Sorocaba to São João de Ipanema (now known as Iperó), where at that time it was located a foundry, run by Friedrich Wilhelm Ludwig von Varnhagen, who was hired by the monarchy to build the Ipanema Royal Iron Factory in 1802.

At the end of March 1819 Natterer traveled from Ipanema to Porto Feliz, on the banks of the Tietê River, from where he hoped to travel inland bound. But his traveling plans of going along the Tietê River to Paraná failed, for the naturalist could not find boats available. On the other hand, the winter season was also the worst time for such a trip due to the low temperatures. Rainfall was constant and temperature fluctuations between a hot day and a very cold night were also considered an obstacle. The tropical vegetation, with its many vines, cane plantations, and very tall trees, did not favor hunting. Because of all these factors, for Natterer it remained only to wait. The work of packing the collections lasted until March 1820. After its conclusion, the naturalist took the large shipment personally to the port of Santos, dispatched it to Europe, and returned to Ipanema. This third shipment of collections now consisted of 22 boxes, and the fourth shipment (in already preparation) added two more boxes. Due to the results obtained Natterer showed confidence of a job well done.

Together with his letters the naturalist also sent drawings of some animals, though the painting was not his specialty. He even wrote to Schreibers about the need of the presence of a painter in the expedition, even though people consider them hard to deal with. The eventual presence of others could cause him some bickering. Natterer constantly place himself as an independent traveler, with few mentions of companies or employees other than Sochor himself, giving the impression that he was traveling alone, which was not true. Besides Sochor, the hunter, for a while even had the company of two European servants and a Negro from Pernambuco. Cargo animals, such as mules and donkeys, also made up his caravan, which, incidentally, imposed a certain rhythm to his trip.

JOHANN BAPTIST NATTERER

Pencil drawing.

Representation of different samples of Capuchin monkey, *Cebus apella*, And of caiarara monkey, *Cebus olivaceus* (*Primates, Cebidae*).

Nº476 *Cebus albicinctus* R [*Cebus apella*]

Nº 477 [*Cebus*] *apella* Erxleben [*Cebus apella*]

Nº 479 [*Cebus*] *albicinctus* [*Cebus apella*]

Nº 480 – 81 *Cebus barbatus* [*Cebus olivaceus*]

NHMW

^{7N} Translator's Note: a distilled liquor made from fermented sugarcane juice.

⁸ SCHREIBERS, *Nachrichten von den kaiserlich-österreichischen Naturforschern in Brasilien und den Resultaten ihrer Betriebsamkeit*. Brünn, vol. 2, 1822, p. 17.

“It's my honor to send you at this time the inventory of my third consignment, which consists of 22 boxes and is already in Rio; and of my fourth consignment, which consists of 2 boxes which in a few days will leave from here to Santos. I wish this new shipment will receive as much approval and satisfaction from Your Excellence as the others, which I have had received much honor from Your Excellence for my previous consignments. And for that I offer my warmest thanks, while assuring Your Excellence with my utmost sincerity, to be my most diligent wish fulfilling my obligations to the best of my ability; and thus to respond to the high wishes of our benevolent Monarch and those of Your Excellence”

(letter from Johann Natterer to Karl von Schreibers. Ipanema; July 6, 1820).





JOHANN BAPTIST NATTERER

Mostonia bilabiatum Natt.

Pencil drawing.

NHMW

JOHANN BAPTIST NATTERER
Pencil drawing.
Probably a second drawing of the
imperial eagle, *Aquila heliaca*
(*Falconiformes, Accipitridae*).
NHMW

JOHANN BAPTIST NATTERER
Pencil drawing.
Side view of an opossum,
Didelphis tristriata Illiger
(*Didelphimorpha, Didelphidae*), female
Ipanema, March 19, 1822.
NHMW



Problems related to caregivers and employees were not Natterer's only concerns. Throughout his stay in Brazil, the naturalist faced great difficulties in order to be able to move around the country. That is why, he constantly appealed to the most diverse Brazilian authorities and to members of the Austrian government, always with claims to let him proceed with his journey, especially when he left Rio for the last time toward the country inland.

Natterer's displacement together with his entourage was not easy. Traveling logistics included not only practical issues related to collecting activities (such as organizing materials, hunting and stuffing animals, preparing taxonomic objects, sending them to Europe, writing reports to his superiors, etc.) but they also forced him to take care of the financial situation for accommodations and the authorizations, not to mention the recommendations, with which he could travel through the Brazilian provinces. Early in August of 1819 Natterer planned to make a trip from São Paulo to the south. He then requested financial aid for this purpose to Daniel Pedro Müller, a military engineer, statistician and cartographer, besides a letter of recommendation to send to the governor of Rio Grande. Contact with Brazilian politicians, authorities and locals was recurrent throughout Natterer's pathway throughout Brazil, and decisive for his staying, the achievement of the trip, and sometimes even for his survival.

The Austrian's relationship with other naturalists traveling in Brazil was also based on the dispute over objects collected and the collections size. For Natterer, it was important that his collections destined to Vienna stand out from those made by other travelers. The collections represented a scientific investment for the European nations, in a way that the bigger, the more representative, and more diverse they were, the better. This way, in addition to reports on his own collections, Natterer also reported in his letters about the activities of other naturalists, with attention to the Germans. The objects that traveler Sellow sent to Leopoldina, for example, were the subject of some of his letters.

Although working conditions were unfavorable and Natterer's constant complaints, the news from Vienna seemed to be promising. The shipments that had already arrived in Vienna pleased the Austrians, that brought him great satisfaction. His third and fourth shipments already promised hundreds of other objects.

However, the great volume of collections continually hindered Natterer from transporting them while traveling. They needed to be stored somewhere, so that the journey could proceed lightly, and that the naturalist could collect new objects. Therefore, when he departed from Ipanema, Natterer left his latest collections there, as well as most of his luggage. Natterer headed south with four Negroes. The European servants, who had previously worked with him were dismissed as Natterer considered them "to be even more masters than he was."

After much insistence, on May 31, 1820, the Vienna court approved Natterer's plans for a major expedition into the interior of Brazil. Wenzel Philipp Leopold von Mareschal, provisional ambassador since September 1819, replacing the recently deceased Baron Neveu, had endeavored in Natterer's favor, succeeded in obtaining for Natterer new passports and permits to visit the formerly forbidden provinces. Mareschal himself, interested in participating in the expedition, became a great supporter of Natterer. The time that had been authorized for such an expedition was two years. After the end of the preparations, the naturalist was able to head towards Curitiba, where he continued his journey.

Mask costume.

Ticuna, Western Amazon, Brazil, circa 1830. Raffia, vegetable fiber, resin, H. Max. 175 cm.

Natterer Collection.

Until today the festivity of girls maturity is the most important ritual of the Ticuna. In this ritual, spiritual beings are incorporated into masquerade fantasies. During the critical phases of the ritual, masked dancers attack both the one being initiated as well as the party's guests. Masked dancers make visible and provable the dangers in which a human being, and like the entire humanity, the Ticuna's community as well, stays during a passing phase. The spirit of the Storm – *O'ma*, with his erect penis – is among the most dangerous spiritual beings. (CA) Weltmuseum Wien





Over shirt.

Itonama, Mojos, Bolivia, circa 1830.

Raffia, length 110 cm.

Natterer Collection.

In Natterer's time, the children traditionally did not wear clothes between the Itonama. Only after puberty was that the young women tied vegetable wool around the waist, and the boys used to wear overshirts like these, made of raffia. In combination with the straw hat, the costume marked the image by which the Indians of the mojos region became known. (BC)

Weltmuseum Wien

Club.

Makuxi, Guyana, circa 1830.
Wood, cotton, stone, length 36 cm.

Natterer Collection.

Clubs Quadrilateral were the typical weapons of the duel between the Makuxi in the 19th century. Nowadays, Makuxi no longer recognizes them as part of their material culture. In the condition of a symbol of intertribal conflicts, the clubs ended up forgotten in favor of a Pan American identity. In the effort to impose its demands on the national state, a peaceful coexistence is postulated among all the indigenous groups living in Guyana. The negotiation of the clubs is the most striking example of how the Makuxi reconstruct their history in order to put it in the service of the present demands. (CA)

Weltmuseum Wien

Neck Adornment.

Ticuna, Western Amazon, Brazil,
circa 1830. Monkey teeth, seeds, plant
peduncles, vegetable fiber, tree bark
material, D. 36.5 cm.

Natterer Collection.

Creating art for the Ticuna, even today, is an important aspect of its culture. They see in it both a means of active resistance against Brazilian National society and an unmistakable expression of their own identity. Sumptuous neck adorning like this, made of monkey teeth, are no longer confectioned nowadays. Its place was occupied by chains of neck with pendants of animal figures. (CA)

Weltmuseum Wien



Third journey: July 1820 to February 1, 1821

In July 1820 Natterer left Ipanema heading south. The naturalist had to leave some equipment in Ipanema, but he still traveled with extensive luggage containing boxes with instruments, supplies and dogs, carried by a caravan of mules and horses. Natterer undertook the trip to Curitiba, through Paranaguá (in Paraná). As the reports regarding this trip are not preserved, it is assumed that the traveler arrived in Curitiba in the summer of 1820.

For a naturalist traveler, working and living conditions in Brazil were adverse. Natterer faced several shortages of supply along the way, and in July 1820 he describes his food to his brother in a letter which, in his point of view, resembled that of his four dogs: green beans and flour. Sometimes meals accompanied chicken or beef. Another issue that concerned Natterer was the risk of losing his companion. Sochor demonstrated doubts whether or not he would continue in Brazil. He had already expressed his desire to return to Vienna, as his children were reaching school age, and the hunter considered his presence important in this process.

The city, home of the regional administration, made no great impression on Natterer. He described it as a poor, provincial town with reasonably wide streets and rather uneven. The main church was massive, but without a tower. The houses had no glass windows – only wooden railings in front of the windows and doors – neither much furniture. In Curitiba, Natterer stayed at a gentleman's farm named José Lustosa, located on a hill 15 minutes from downtown.

The passage through Curitiba opened for the naturalist a new work opportunity: the collection of ethnological objects. In Curitiba began his contact with Brazilian Indians, which gave him until the end of the trip a precious collection of museum objects. He obtained many indigenous objects through a German doctor named Renow, who lived in the region and received them from the natives. Nevertheless, the collection of ethnological objects did not mean a decrease in the collection work pace for other collections. Natterer was still collecting relentlessly hundreds of objects of all kinds. By that time, the naturalist also received information about the indigenous groups he could find if he continued his journey to Santa Catarina: Votorons, Tactaias and Kamés. On this trip he created one of his first indigenous glossaries, an activity that would continue for years to come.

While traveling the naturalist made powerful contributions to the museums of Vienna. At the time he sent to Europe 22 boxes. Nevertheless, the horizon that seemed to be promising suddenly tarnished due to political turmoil in Brazil and Europe.

In the 1820's Brazil began to go through strong political instabilities. The royal Portuguese family remained in Rio de Janeiro; that created discontentment in Portugal, England, and Austria. D. João VI was pressured by the Lisbon courts to return to Portugal. Moreover, displeased with the English presence in Portuguese territory and feeling abandoned by the royal family, the Portuguese initiated in their country a liberal revolution that demanded the king's return and the proclamation of a constitution. The liberal character of this revolution reverberated in Brazil, which led Brazilians from many cities to join the Portuguese movement. D. João VI tried to control the situation, but he was unable to postpone his stay in Brazil. In April 1821 he was forced to return to Europe, at the risk of forever losing his throne. In Brazil the political disturbance did not diminish but evolved in such a way that the movement for independence from Portugal grew.

Baskets of transport.

Apinayé (Apinajé), eastern Brazil, circa 1821. Leaf strips, raffia and plant string, palm leaf, seeds, dye, H. Max. 42.5 cm.

Pohl Collection.

According to Pohl, this "indigenous tribe of the Apinagés [Apinajés]" was "one of the most numerous and polite [...]." "They say that their villages are quite populous, and several types of industrious activities are not strange to them. They possess large quantities of objects made by themselves, they breed livestock and keep captive ostriches, parrots, and others. Their artistic ability in the making of the aforementioned utensils is excellent, and their stems, baskets, trumpets, wooden pestles and other objects are very requested. [...] In addition, these Indians are very peaceful, live in harmony, they are active and work hard, they also know how to get profit out of some accessory with their commitment and their work. Thus, for example, they assist the travelers of the Maranhão River to carry the luggage up through the rocky mountain range near the waterfalls." (JEP)

Weltmuseum Wien



In November 1820 Johann Natterer wrote to Brother Joseph about his plans to travel further south. However, four days later a letter from Mareschal reaches him ordering his immediate return to Rio de Janeiro. The new Austrian ambassador, Bartholomäus von Stürmer, would soon arrive in the capital, where he wanted to personally decide the fate of the expeditionists who were still in Brazil. By that time other members of the expedition had already returned to Europe. Mikan, Ender, and Buchberger had returned in 1818. Due to a serious accident on his first trip to Cabo Frio, Johann Buchberger had left on the first transport to Austria. The painter Thomas Ender had also returned for health reasons after just a few months in Brazil. With many difficulties to get accustomed to Rio de Janeiro, Mikan had also left in 1818.

At that moment, Natterer thought he could still convince ambassador-to-be to support his traveling plans to Mato Grosso. With this purpose he would show him the collections made in Paranaguá. Natterer was determined to travel westward of the country. In order to do that, he had been planning, saving even money for this enterprise.

In December 1820 Natterer departed from Curitiba to the capital. He had traveled with his collections for four days through dangerous mountain paths toward the port of Paranaguá, where in January 1821 he boarded a ship to Rio de Janeiro. The sea voyage lasted 22 days. In early February Natterer finally arrived in the capital. Even under such unfavorable conditions, the naturalist would not give in his plans so easily.



Erica
fascicularis.

JOHANN BUCHBERGER
Erica fascicularis
watercolor, before 1817.
NHMW

JOHANN BUCHBERGER
Dryas octopetala
watercolor, before 1817.
NHMW



Dryas octopetala?



MICHAEL SANDLER
Emys Maximiliani.
 Hand-colored lithograph, printed by the
 Lithographic Institute of Vienna, 1820.
 The species was dedicated to Prince Maximilian
 zu Wied-Neuwied.
 NHMW



JOSEPH AUGUST SATORY
Gloxinia schottii.
 Hand-colored lithograph, printed by the
 Lithographic Institute of Vienna, 1820.
 Mikan named the discovered species
 according to Heinrich Wilhelm Schott,
 the expedition gardener. Two specimens
 collected in the Serra Grande arrived alive
 in Vienna and the artist was able to make
 the illustration with the living plants
 as a model.
 NHMW

MICHAEL SANDLER
Coutarea pubescens.
 In: *Plantarum Brasiliæ icones et
 descriptiones hactenus ineditæ*, volume 2.
 Hand-colored lithograph, Vienna, 1831
 NHMW



Lafcensia microphylla.

THOMAS ENDER
View of half of corcovado mountain,
near the beginning of the aqueduct,
towards the center, over the Rio de Janeiro
bay and the *Serra dos Órgãos*.
Passingini copper engraving, n.d.
NHMW





F. Papini sculp.

Forth journey: March 1821 to September 1822

Far away from Rio de Janeiro, Natterer received the news about the end of his journeys with sadness. To his superior he expressed his opposition displeasure for not being able to continue his trip to the south and for not being able to reach Uruguay and explore the vast prairies of Rio Grande as he intended. His hopes of collecting natural objects there disappeared, and perhaps forever. On the other hand, the glimpse of the trip to Mato Grosso was getting farther and farther away.

In January 1821 he was then summoned to return by Stürmer himself, a newcomer to Rio de Janeiro. In fact, Natterer had already left for the capital. He had sent Sochor and the remaining personnel to Ipanema with the mules, horses, and equipment, and asked the hunter to await instructions. He overtook on a dangerous four-day crossing through the rugged coastal regions between Curitiba and Paranaguá. When he arrived there, he still had to wait another month, until on January 10, 1821 he found a ship that would take him to Rio, where he arrived in February, after 22 days of sea travel.

while in Rio, the resolutions took place according to Natterer's wishes: Mareschal informed him that he had received the passports and the necessary permits to go to Mato Grosso, and that the naturalist could leave in July or August. With that, Natterer expected to swiftly depart from the capital. Botanist Schott and painter Frick expressed their desire to join the zoologist on the trip to the Brazilian Midwest.

But soon the political tensions involving Portugal and Brazil intensified. The courts in Lisbon required a constitution and the king's return. Liberal movements were growing in Brazil, encouraged by the revolts in Portugal. Even before D. João VI's return, a rebellion in Bahia had declared union with the Lisbon courts. D. João had to go back and D. Pedro remained in Brazil as its regent. But this contradicted the Austrian Chancellor: Metternich thought that Brazil, although already elevated to the condition of United Kingdom to Portugal, should be ruled by the Lisbon court, and that D. Pedro should have in Brazil only a diplomatic role.

Aware of the political turmoil, Stürmer was concerned especially with the safety of the expedition members and decreed the end of it. Although he previously supported a generous endowment for the venture, he has surprisingly shifted his position and began to consider the costs very high.

One last attempt to keep his traveling plans was made by Natterer and Schott. Knowing the importance of financial support, and how its lack could prove to be a serious obstacle to his plans, Natterer had previously prepared for potential emergencies. He had arranged with Major Wilhelm Feldner the acquisition of a low-interest loan; in addition, if necessary, he had even articulated a traveling proposal in the service of the English government. But the Austrian government refused such possibilities. Natterer, Schott, and Frick even proposed waiving their pays, but Stürmer was uncompromising and upheld his decision.



HEINRICH WILHELM SCHOTT
Wenzel Liepoldt, *Caladium asperulum*.
Pencil and gouache, n.d.
NHMW

HEINRICH WILHELM SCHOTT
Johann Oberer, *Anthurium affine S [chott]*.
Pencil and gouache, n.d.
NHMW



In spite of the protests, Baron von Stürmer ordered the return of all travelers. Pohl and Schüch were the first to embark back in April; Schott left a few weeks later, along with Stürmer, on June 21, 1821; remaining only Natterer and Sochor on Brazilian soil. But they could not return immediately. Sochor had fallen ill. Natterer had then skillfully convinced Stürmer that he should return to Ipanema to properly pack the equipment for the ocean-crossing trip, as Sochor would not be able to take back the amount of luggage and items which remained in the city with him. Stürmer nodded, then ordered Natterer to pick up Sochor, pack his gear, and ship from Ipanema directly to Europe. With that, Natterer had gained time. In the meantime, he urged Schreibers earnestly to intercede on his behalf, as he thought he could still do much for Austria in Brazil.

The naturalist's feeling was of frustration. But he took the time to work on his traveling plans. Vienna's responses could take months, and Natterer didn't want to waste much time again. So, he returned to Ipanema, where Sochor and the boxes he had left were. They were the last remnants of the Austrian expedition in the country. This return also served Sochor to reaffirm his commitment to continue with Natterer on his trips. Because Natterer never stopped dreaming about the possibility of traveling to the interior of Brazil.

Nevertheless, the political issues in the country did not soothe. The news came to Natterer that D. Pedro would have to return to Europe, which would mean the loss of a supporter, for the naturalist. D. Pedro's situation was not elementary. At first, Brazilians had identified with the causes of the Portuguese population. However, when they learned that Portugal wanted Brazil to get back to its colony status, Brazilians began to unite for independence from the Lusitanian country. This union, however, did not mask the regional provinces interests, with the northeast closest to Portugal and the south in favor of a total rupture with the Portuguese. In the midst of this dead end, the Austrian court, through Mareschal, his commissioner in Brazil, recorded the revolutionary movements and feared that D. Pedro's return to Europe would definitively separate Brazil and Portugal⁹. More and more pressured by the Brazilian forces and his national conscience, on January 9, 1822 D. Pedro received a petition with thousands of signatures asking him to make a decision and stay in Brazil, or else the separation between the two countries would be inevitable¹⁰: Brazilians wanted to ensure the heir's presence in Brazil and to suspend the recolonizing wave that prevailed in the metropolis. D. Pedro chose to resist the Portuguese courts and to remain in the country in an episode which was historically known as "Dia do Fico"^{TN}. From that moment, a new ministry was organized under the command of José Bonifácio de Andrada e Silva.

JEAN-BAPTISTE DEBRET
Acclamation of D. Pedro I, Emperor
of the Brazil, at Campo de Santana in
Rio de Janeiro.
Colorful lithograph of Thierry.
Voyage pittoresque et historique au Brésil,
Paris, 1834-39.

⁹ BIRKHOLZ, Andreas. *Österreich und Brasilien: 1816-1831*. München: Philosophische Fakultät, Ludwig Maximilians Universität, 1970, p. 21.

¹⁰ HANDELMANN, Heinrich. 4th ed. Trad. of Lucia Furquim Lahmeyer. São Paulo: Editora da Universidade de São Paulo, 1982, p. 209.

^{TN} Translator's Note: "Dia do Fico" means I-Shall-Stay Day

“Our resolute will is solely and exclusively to fit His Majesty’s wishes and the naturalists’ expectations. We long for bringing the Imperial Museum collections to a high degree of perfection, to glory, to undertake such a great endeavor – that alone is what inspire us for this purpose. The undertake was not a financial gain, this might be demonstrated by our April 30 presentation and our previous work. ... There is still burning in me a spark of hope that I may still receive a letter from Your Highness here. It is so difficult to me to completely give up on the idea of still making collections in Brazil that I can’t help but glimpse this last hope. Therefore, I request and earnestly appeal that Your Highness intervene in favor of the cause, since Your benevolent concepts about me and Your great interest in the progress of the expedition creates this expectation, and that Your Highness may write to me, without delay, orders to act ”

(letter from Johann Natterer to Karl von Schreibers, Rio de Janeiro, May 4, 1821).



José Bonifácio's new position would be beneficial to Natterer. He had met the minister during his stay at the iron foundry in Ipanema between 1819 and 1820, and met him again in September 1821, when Bonifácio was vice president of the local board. Natterer had already obtained the necessary approvals to go to the interior of Brazil. Nevertheless, they had been issued at the Portuguese government period, and with the new pro-independence situation the permissions could have lost their validity. That is why he requested Bonifácio to reinforce the orders already issued. To consolidate the deal, he promised the minister to send duplicates of his collections to the Imperial Museum of Rio de Janeiro (current *Museu Nacional*) in return for the request he was making. He also sent a similar request to D. Pedro.

Natterer's plans were successful. Sochor's sickness and preparations retained the Austrians long enough to receive approval from Austria to continue their journeys. These approvals arrived in the summer of 1822. Natterer planned to travel from Cuiabá to the Amazon along the Tapajós River. But traveling the interior of Brazil also involved the need to travel as well as by river ways, demanding navigation equipment and able oarsmen. However, it was not sure that this equipment could be found at the time it was needed. Besides, river trips depended on the rivers water volume which were only navigable at certain seasons. On the other hand, in case the trip to the Amazon through the Tapajós did not happen, the land route seemed to be an unfeasible option, since it would have to travel about 600 kilometers from Cuiabá to Goiás.

Briefly, due to all these factors Natterer could not determine the traveling time, and therefore he could not send precise information to Austria about his future trips. Even so the trip was approved. It seemed that with the approval, the authorities in Vienna assumed the risk of its execution. Still, Mareschal could not transfer the resources necessary for the trip from Rio by bank. After a month negotiating in Sorocaba, Natterer finally struck a deal with Antonio Joaquim de Lemos Gomes, an accountant from the Ipanema metallurgist, who sold him 110 wild mules accepting letters of credit as payment. The naturalist planned to resell the animals in Goiás, because he knew that there was a shortage of sumpter.

While the naturalist was finishing preparations for his departure, Brazil was in a rupture atmosphere with Portugal. In September 1822, D. Pedro made a trip to São Paulo to resolve a political quarrel between the provincial president and the Junta^{TN}. During the tour, the Prince Regent received news from Rio de Janeiro that Lisbon would send an expeditionary force to Brazil^{II} with actions that could reduce the prince's power in the country. As an immediate reaction of the statement and the inability of holding an ambiguous position about the Brazilian question; on September 7, 1822, D. Pedro declared Brazil's independence.

Fortunately to Natterer, this political process did not affect his journeys. After a year of preparations in Ipanema, in October the Austrians and their associates set out on their so-expected trip to Mato Grosso.

Showcase XVII with Bororo's objects.
Watercolor of unknown artist.
Circa 1840.
Weltmuseum Wien

^{TN} Translator's Note: JUNTA in this case would be a governmental council

^{II} RAMIREZ, Ezekiel Stanley. *As relações entre a Áustria e o Brasil*. Trad. of Américo Jacobina Lacombe. São Paulo: Companhia Editora Nacional, 1968, p. 27.

“Sir. Says John Natterer, naturalist of His Austrian Royal Imperial Majesty, commissioned by the same Lord to make collections of natural history objects for the Vienna public museum, and traveling to that purpose in this kingdom of Brazil with regional approval and consensus, which was granted to the supplicant by the august father of Y.H. This license is necessary for his free journey and transit through the provinces of São Paulo, Minas Geraes, Goyaz, Mattogrosso, Pará and other capitals, and the august Lord has even ordered the constituted authorities to provide the supplicant with the correct and leading assistance to that objective. Thus, wishing to continue in his digression, he appeals to Y.R.H. deign to renew with Thy good pleasure the so-called order of Thy grace R.M.”

(*Letter from Johann Natterer to D. Pedro, Ipanema, April 20, 1822*).



Fifth Journey: October 1822 to December 1824

By the end of 1822, Natterer was still far from Mato Grosso. And there were a lot of obstacles along the way: He was going through financial trouble because of the delay in receiving money, and he could not easily find qualified people to accompany him on the trip. He missed the noises of the Ipanema factory, which, being far away from his own home, it had become like a home to him. The following years would be hard and severe; besides he would have to take many precautions. His job rewards would be the abundant collections.

Ipanema's departure was tumultuous. Natterer left in a large caravan of 147 mules, four horses, and two mares. Traveling with such a large number of animals meant risking himself with great inconvenience. On the way, the mules were disturbed as dogs chased them. In a letter to his brother, the naturalist explains how an animal had fled and its search had lasted several days. Only on the ninth day, word came that it had been found dead. Only its cargo was recovered, despite the constant rains, which fell mainly at night. Although it was saved, many others were soaked. Only two weeks later the caravan was able to proceed its journey. In the early days some mules still got dispersed. But over time, they calmed down. However, this did not prevent the traveler from experiencing further loss of pack animals along the way due to accidents or ingestion of toxic herbs¹².

His route went from Ipanema northwards through Sorocaba, Pirajiba, Pirapitingui and Vila de Itu, where the traveler spent a few days near the bank of the Tietê river. It would take only two days of rest for the animals; but other circumstances held him back in Itu. Together with Sochor, Natterer visited a German doctor and the village ombudsman, who was his acquaintance. The rains prevented a brief departure again. Meanwhile, Natterer reveled in the waterfall view, for he considered it a majestic painting, worthy of being registered by an artist.

The naturalist hoped to find many new things in Mato Grosso. Therefore, he would like to spend a year there, and then only later he would follow the trip through the Tapajós River. However, the constant financial problem worried him: in Cuiabá he would find the highest prices. His animals were worth 7 or 8 thousand guilders, and he did not want to sell them; but there was little hope that he could keep them. Later, he wanted to go to Pará and from there navigate along the Amazon River all the way to the Peruvian border. In Pará, he would receive a money order from the English Consul. If it was not possible to pass through Mato Grosso – as he had not yet received confirmation of the authorization of his entry into the province – then he would have to go down through the Tocantins region towards Maranhão and from there to Pará. It was difficult to establish a sealed plan because he did not know if he would get the provincial permits. Moreover, he was unaware of what the Austrian instructions would be and how he would travel in the place he would go. Therefore, little could be said in advance. The distance and the delay in communication influenced not only his plans but also his mood. By this time, the naturalist already felt that he was living a sad and lonely life with stacked suitcases that formed a table used to write his brother's letter.

¹² SCHMUTZER, Kurt. *Der Liebe zur Naturgeschichte halber: Johann Natterers Reisen in Brasilien 1817-1835*. Wien: Verlag der Österreichischen Akademie der Wissenschaften, 2011, p. 125.

After a few days in Itu, they went through Campinas, Mogi and Vila Franca. Natterer also move accross the Serra de Cubatão and Araraquara until reaching Goiás in early August 1823. The frequent rains became the cause of the long time spent on the routes. There is little information about this route, and it is not possible to say if the traveler has managed some type of accommodation. The interior regions were sparsely populated, that is why it was hard to find a suitable home. Often, huts were improvised, which hindered a thorough protection of the loads. The passage through Goiás was short and allowed above all, the animals to rest and provide the supplies. As previously planned, he sold most of his mules to make money. Besides, there was an opportunity for Mareschal, Schreibers, and Joseph Natterer to correspond with each other after almost a year of silence. From there he also wrote again to José Bonifácio, in order to thank the ordinance that Bonifácio sent him, which he could only receive when he arrived in Goiás. He took the opportunity to justify himself for not having sent the collections duplicates due to the difficulties of the trip. But when he got to Cuiabá, he would send the shipment.

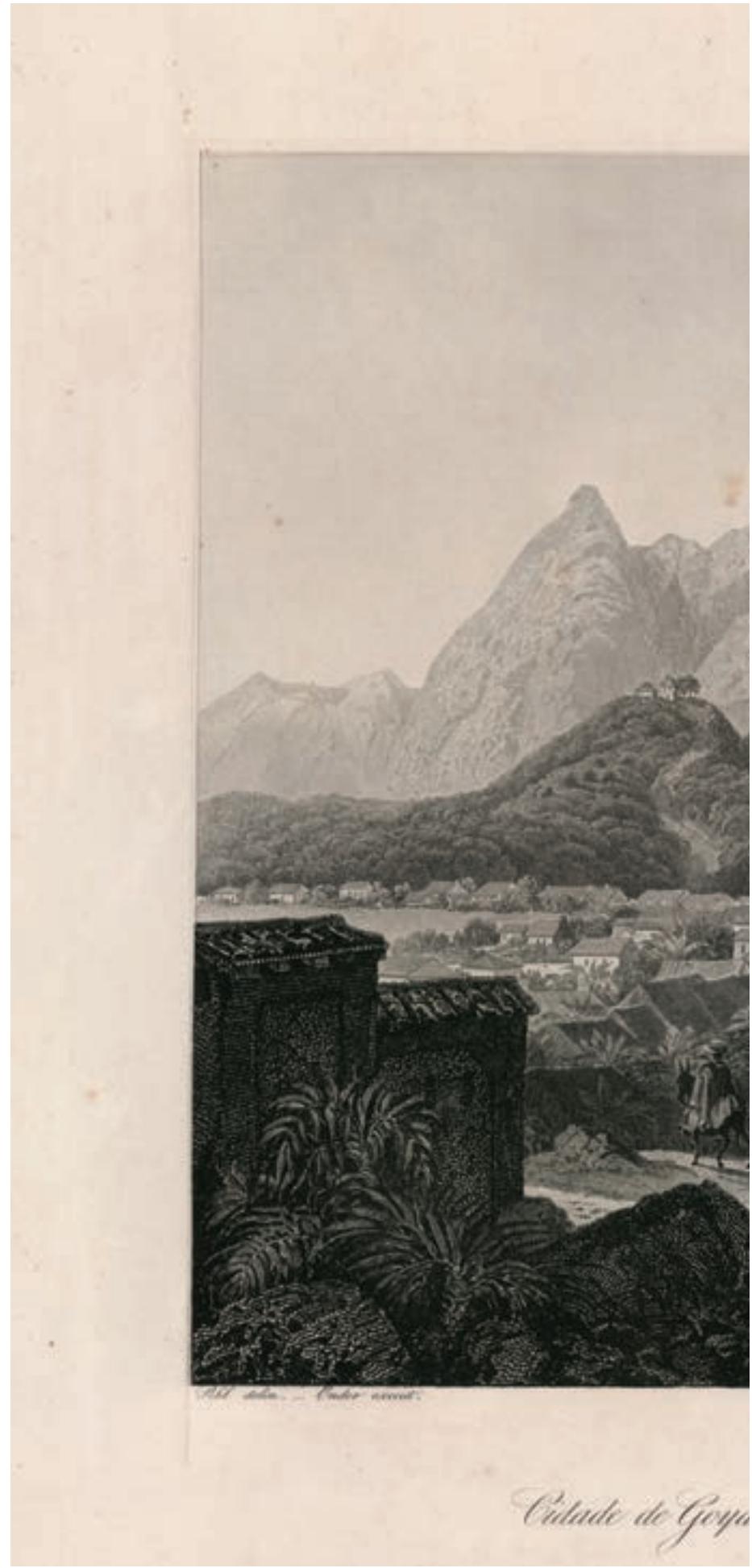
According to his plans, he would spend the next rainy season in Cuiabá. From where you would then go to Vila Bela de Santíssima Trindade. It was not clear enough whether this city, in the far west of the province, would successfully go to the north of the country¹³. Brazil's post-independence situation was not stabilized. Regional differences prevented Pará and Maranhão from recognizing the new emperor, and this could become a hindrance to Natterer's transit in that region. In relation to foreign policy, after 1822, relations between Brazil and Austria were marked by negotiations over the recognition of independence.

In September 1823 the traveler left Goiás with 12 food-laden mules. The rest of the animals carried the equipment and the scientific collections. The trip followed the courses of Forte and Araguaia Rivers, near the border with Mato Grosso. The camps were on rivers banks. The route was not simple, and travelers went through constant food deprivation. In addition, conditions were precarious and there were significant losses of equipment and supplies due to accidents with mules. With much adversity, the group arrived in Cuiabá in December 1823.

Being in Cuiabá meant for Natterer an opportunity to go to other rarely visited places in Brazil, such as the Amazon, Negro and Madeira rivers. However, these trips were still mere supposition since the naturalist could not make detailed plans – it was necessary to obtain information about the river courses, when they would be navigable and when rains season starts, and to know the people with whom he would travel. Only in Cuiabá could he get information on how to make his trips, and so he had to revise his plans: the easiest way north was to follow the Guaporé and Madeira rivers. This route would also be productive, as he could still travel through Pantanal and cross part of Paraguay.

¹³ SCHMUTZER, Kurt. *Der Liebe zur Naturgeschichte halber: Johann Natterers Reisen in Brasilien 1817-1835*. Wien: Verlag der Österreichischen Akademie der Wissenschaften, 2011 p. 129.

JOHANN EMANUEL POHL
Goyaz City, formerly Villa Boa. Capital
of the Captaincy of the same name.
Image captured by Pohl with the help
of a lucid Wollaton camera, executed
under Ender's supervision and engraved
in copper by Axmann, n.d.
NHMW



Cidade de Goyaz



Goyaz, früher Villa Rica, Hauptstadt der gleichnamigen Capitania.

“Today a great rain fell. That’s why I have to sleep at home. It’s a sad life. I sit lonely next to two stacked suitcases, which pathetically form a table, and I write these lines. ... Under the roof a cricket sings tediously. And outside is the near roar of the Tietê, which furiously casts its dark brown bodies of water about 20 feet high on granite rocks”

(letter from Johann Natterer to Joseph Natterer, Salto do Tietê, 2 November 1822).

“Food is very expensive here and is usually not available, as people plant little and Santa Rita is 10-12 days away downstream from where all that is needed is obtained. (...) In addition, we still had to rest on December 3, 4, and 5 to dry the load with which a donkey had plunged into the Riacho Sangrador. (...) On the 11th we arrived at the São Lourenço River, where there was the misfortune of four well-stocked animals to fall into the turbulent river flow (...). With great difficulty animals and cargo were saved, but everything was soaked, and much got spoiled.”

(Letter from Johann Natterer to Baron de Mareschal, Cuiabá, February 14, 1824).



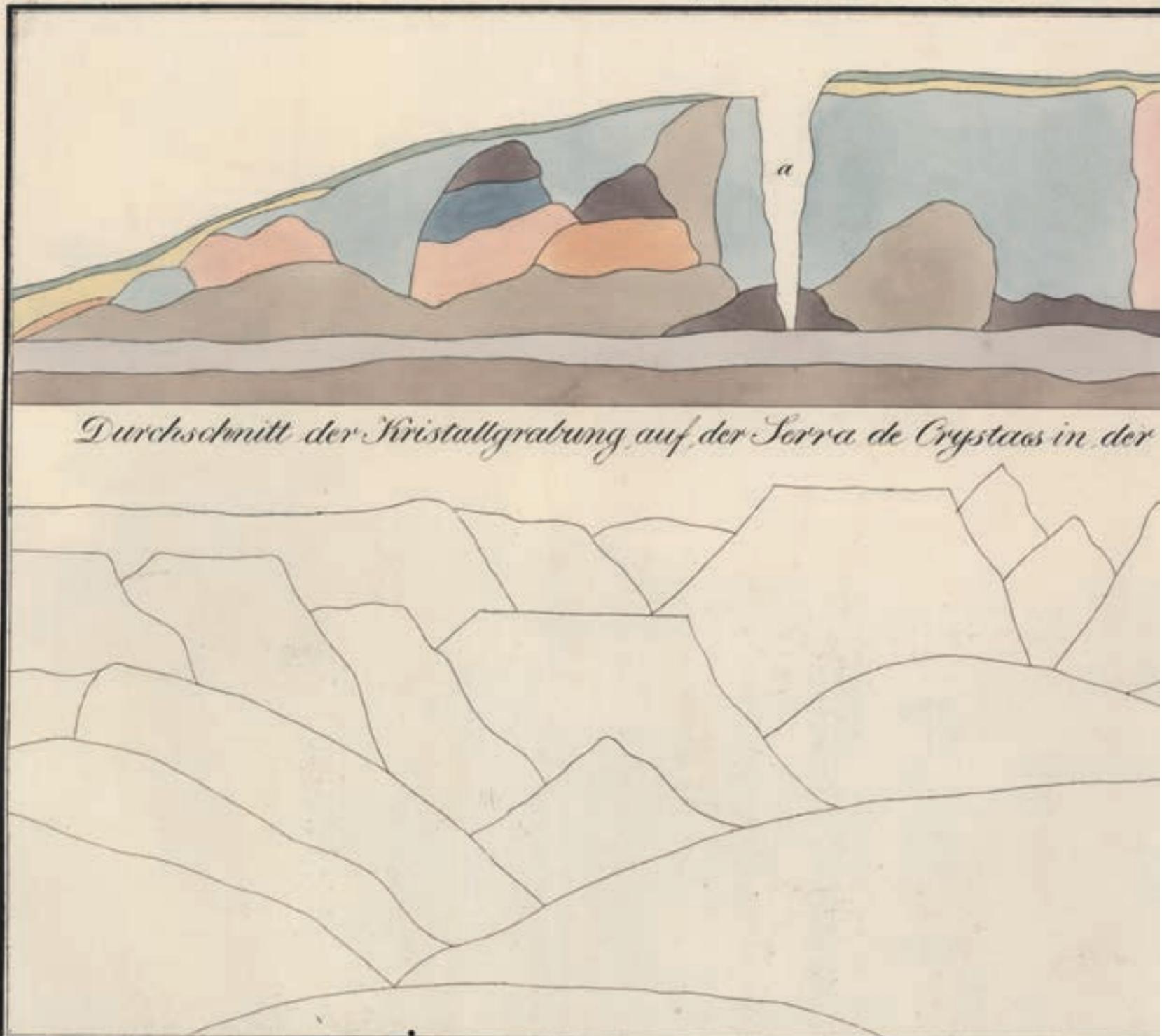
Objects used in the expedition.
Popular culture, Mato Grosso, Brazil,
circa 1830. Leather, horn, palm leaf, wood,
vegetable wool, Max. Length 81 cm.
Natterer Collection.

In order to avoid missing anything for
the expedition members during the trip,
objects belonging to the local population
were also used. The most important of
all was a plentiful stock of drinking water,
which was transported in bags of tanned
ox leather like that of this illustration.

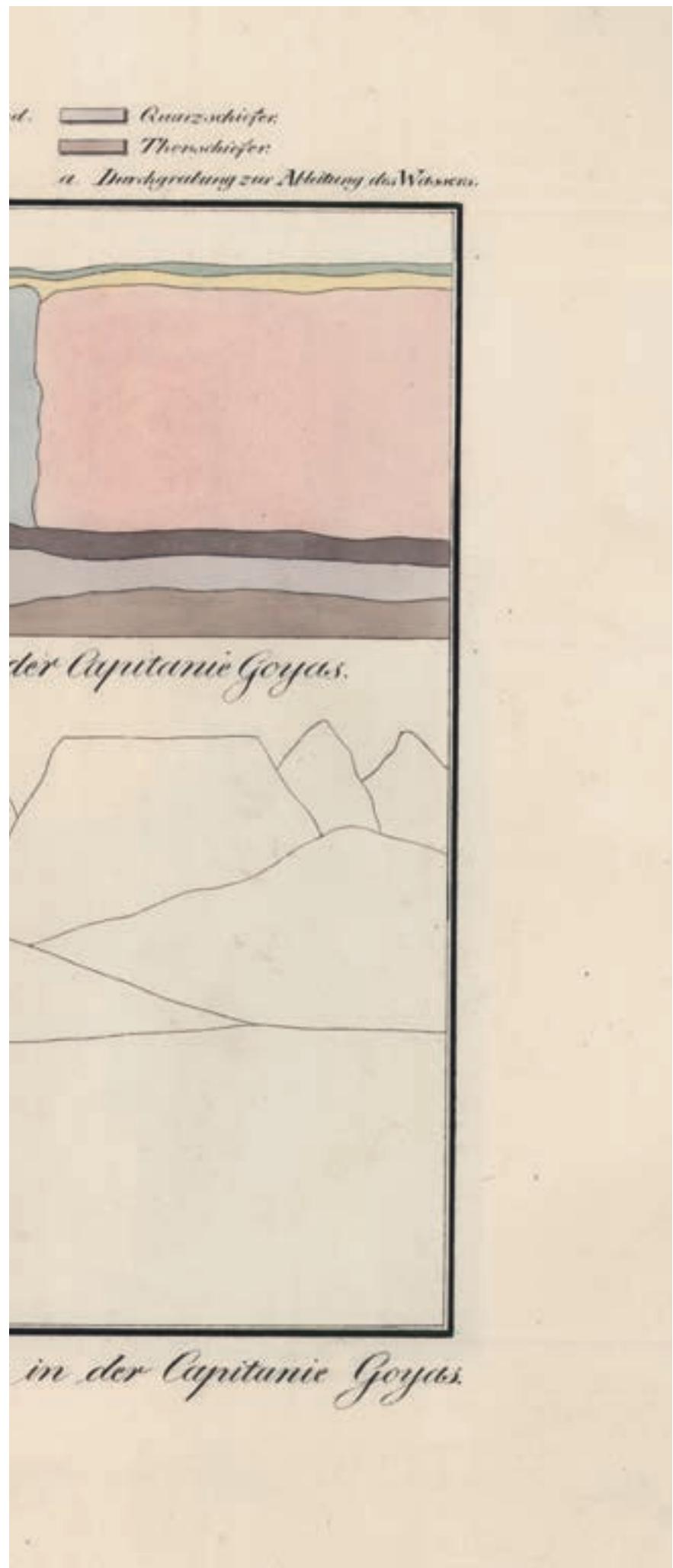
Mugs made of horn were used, in order
that it was not necessary to get off the
horse to drink. They were fastened to a
string which allow them go downward,
holding them by a leather belt. The horns
were filled with water and then they were
pulled upwards again, so as to allow one
to drink. (BC)

Weltmuseum Wien

Thonige Dolomide.	Eisenhaltiger Sandstein	Quarz als Säulen ansteckend.
Gitter-Thon mit Bergkristall.	Blauelcher Thon mit Bergkristallen	Aufgelöste Bergkristalle.
Eisenhaltige Sandstein-Breccie	Citrongelber Thon mit Sand gemischt	Eisenhaltiger Thon.



Umriss des Talk und Quarzschiefer-Gebirges der Serra de Crystaes in



JOHANN EMANUEL POHL
Diameter of crystal excavation and contour
of soap stone and quartz shale rocks in the
Serra dos Cristaes, in the goyaz captaincy.
NHW

Sixth voyage: January 1825 to July 15, 1829

In early 1825, still in Cuiaba, Natterer continued to suffer from his sickness pains. He depended considerably on Manso's help; but the most crucial moments had passed. The regular meetings deepened the friendship between the two, and the Austrian even took the occasion to teach German to the Brazilian. The extension of his stay due to his illness provided him some advantages. He could establish networks of cooperation with locals, authorities, and local informants, as well as foreign merchants, and began to strengthen relations with other travelers. On the other hand, the naturalist was able to succeed to obtain a considerable increase in his collections - more as a result of the activities of his work team - which included hunters and slaves - than through his own efforts, as his ailment extended for a long time yet. Through intermediaries he acquired at the time many objects and ethnological collections. From a Mato Grosso military named Antonio Peixoto de Azevedo, he obtained several objects from the Mundurukus and Apiakás Indians. This way, he sent to Europe two boxes which, according to the naturalist himself, would take the Vienna collections to perfection.

While Natterer was in the interior of Brazil, Rio court was still seeking to obtain recognition of Portugal's independence from other European countries. After its proclamation the negotiations with Portugal, England, and Austria extended for another three years. Only in 1825 did they come to an outcome when the English took the lead in diplomatic intermediation between the courts of Rio de Janeiro and Lisbon. The resulting document from there met the Portuguese requirements, although they displeased D. Pedro I. Austria took a passive position at the end of the process. For a few months, relations between Brazil and Austria remained stable, with no major consequences for Natterer's stay in Brazil.

With a weak health, the naturalist could only leave Cuiabá in June 1825. Due to the delay, he could not head south of the Mato Grosso Pantanal. His next steps would then be towards the western end of the province, to the town of Vila Bela de Santíssima Trindade. Natterer left Cuiabá and took two months to reach Caceres. There are few letters to his Austrian superiors recording this period. In the meantime, his friend Manso was the only one to hear from him. To Manso, the naturalist had constantly requested medicine due to his serious health situation. His condition was terrible - he repeatedly complained of ulcer, scabies, liver inflammation, diarrhea and foot sores.

Natterer and his caravan continued their journey on September 28, 1825, they stopped at a farm called Caiçara to hunt in that region. Natterer reported in a letter about the unhealthy weather conditions that provoked all types of disease to the inhabitants of that locality. In that region people died for lack of well-trained doctors. He feared, therefore, that his fate would be the same. Due to this, he upheld himself, preferring to extend his stay on the farm for eight months, until June 1826.

The naturalist felt isolated from the people with whom he traveled who are hardly mentioned in his letters, and he desired Manso's company. He shared his feelings of loneliness with Langsdorff, the Russian consul-naturalist who was at the same time undertaking a scientific journey through the interior of Brazil. He wanted to meet him and see his zoological collections. He hoped that perhaps they could see each other in Cuiaba.

Set of a warrior's headdresses with trophy head.

Munduruku, Tapajós River, Brazil, circa 1830. Feathers, cotton.

Natterer Collection.

For a ritual cycle of large dimensions that covered the head hunting, the Warriors Munduruku presented themselves in a festive attire of feathers, whose elements are represented, almost entirely, in the Natterer collection: Along with the dresses, it was part of the festive attire a belt (tempe-á), which was worn Circa the waist, from which they hung the feathers, hanging on the front, back and sides.

In one of these "aprons" were integrated fruit lumps rattles. The "Shoulder Laces" (curuapé) were used either individually or with a fardel, like a scarf, on the upper part of the body. In their coloring, these inlaid cotton strands, applied with of macaw plumes or rufous-capped antthrush (family Cracidae), look like "uniforms": they are Red or yellow, with fringes of various colors, or totally black. The pieces reminiscent of epaulette (bamam) were used Circa the arm. On the arm bands are hung feathers, of typical placative coloration of the Munduruku, which move freely. In the collection, in addition to the bands for the knee and ankle, the ear ornaments are missing: a kind of feather rosette with tassels.

The trophy heads were also adorned with these earrings, which were used in the first stage of the ritual, which name was given to them from this act. (WK)
Weltmuseum Wien







JOHANN BAPTIST NATTERER
Side view of a driftwood catfish,
Auchenipterichthys thoracatus
(*Siluriformes, Auchenipteridae*).
D[orsal] 1/6, c[audal] 19, a[nal] 22, v[entral] 7
p[ectoral] 1/7, n° 93, male.
Vila Bela do Mato Grosso, June 1828.
NHMW

Feather head Adornment.
Apiaka, Arinos River, Brazil, circa 1830.
Feathers, vegetable fibre, H. 67 cm.
Natterer Collection
Weltmuseum Wien



JOHANN BAPTIST NATTERER
Side view of an apaiari,
Astronotus ocellatus
(Perciformes, Cichlidae).
Dorsal 3/33, caudal anal 3/, ventral 1/6, pectoral 14, n° 65.
Ankara crassipinis [species] new
[Vila Bela do] Mato Grosso,
August 21, 1828, September [1828].
NHMW

On the other hand, he did not state to the Austrian authorities the discouraging and disturbing details of his travels in his letters. In a note to Mareschal of June 1826 Natterer slightly describes the lack of adequate food, his health condition, and some mishaps on the way. He concealed his real situation of isolation, disease, and loneliness. He preferred to highlight in his report a long list of collected animals and their descriptions, and emphasized its significance to the Vienna Museum. In his letter gives information about the indigenous people of the region, specifically the Bororos.

In that same month Natterer continued his trip to Vila Bela de Santissima Trindade, former capital of Mato Grosso. He left in Cuiabá a total of eight boxes containing some collections intending to pick them up on his return. By the occasion, he planned to meet Langsdorff, as he writes to Manso. In October he arrived in Vila Bela, which like Cuiabá had an unhealthy climate. In the eighteenth century, these villages developed a strong economic activity due to gold production. With its decay in the next century, the region declined and was plagued by disease.

From Vila Bela Natterer determined to head for Pará through the Guaporé and Madeira rivers, since the river course allowed the navigation of large boats all the way to the Amazon. For such a trip the naturalist depended on boats and crew. He requested them to the president of the Mato Grosso province, José Saturnino da Costa Pereira; who, in the end, did not comply with his appeal.

The plans seemed to work. Nevertheless, relations between Austria and Brazil were entering a new phase of instability, which threatened the traveler's stay in Brazil. The year 1826 was marked by deaths that affected the relations between Brazil and the European nations. D. João VI's death in March left the Portuguese throne vacant and opened new conflicts in the succession issue. D. Pedro I did not want to lose the Portuguese crown and thought of establishing a dual monarchy, playing the role of monarch in Brazil and Portugal. Austria did not appreciate such an idea and was concerned first and foremost with restraining the advancement of liberal ideas in Portugal. England, for its part, endeavored to prevent a coup d'état led by D. Miguel, D. Pedro I's brother and a representative of absolutist tendencies.

The attitude taken by D. Pedro I was somewhat ambiguous, which delayed decision making and displeased other countries. The issue extended throughout 1826, when in December two other deaths directly affected the course of the scientific expedition. On December 11, D. Leopoldina passed away, after years of psychic pressures and a severe weakening of her health. Two days later Sochor, Natterer's aide died. The hunter had become seriously ill after an incursion into the village of São Vicente. Upon hearing of his illness, the naturalist went to help him, but it was too late. Despite the care received at the farm of Mrs. Gertrudes Adelaide Delfina Ravin Pinto, sister of Antonio Peixoto de Azevedo, Sochor died of an acute fever attack and was buried in São Vicente's Church.

After Sochor's death, Natterer stayed for a few days in São Vicente hunting birds. As a result, he also fell seriously ill in January 1827. He was attacked by a severe fever, which had persisted for days and even caused delirium, temporarily removing his body movements. He had suffered for years the consequences of this disease, which in São Vicente made him thin, caused his feet to swell, his face turned, and lost almost all his hair. A decisive person in his recovery had been the same Dona Gertrudes. To honor her, Natterer would baptize his daughter years later with the name of his savior.

Because of his illness severity, not to mention the illness of one of his slaves, Natterer was only able to return to Vila Bela in May 1827. When he arrived there, he was greatly astonished. The rats caused great damage to their taxidermic preparations and documents, even breaking the vial seals with samples of intestinal worms. He spent several weeks repairing and re-packaging the objects.

While performing his work, he received in July 1827 express orders to return to Vienna. After the empress' decease, an important bond between the two countries was lost. Negotiations on the succession of the Portuguese throne displeased Austria, which expected an action from D. Pedro I. The issue got even more complicated when the Brazilian emperor decided to turn to the Vienna court to find a new wife. Diplomatic relations between Brazil and Austria were predictably heading to a dead end. The order for the naturalist's return had been issued by the Austrian emperor in January of that year, but due to the long distance of his relocation, Natterer received them months later. Mareschal had already written to Metternich, warning him of the difficult circumstances of communication between the parties.

Natterer had already made plans for his trip. Despite his weakness and Sochor's death, he still had no desire to return to Europe. The new order would go against his plans already established and agreed with the local authorities to follow the rivers to the province of Pará. It had been a long time since he prepared his trip back starting from Grão Pará, and because of that had reduced considerably the number of mules he had. Moreover, the distance from this province to Mato Grosso was similar to the distance between Mato Grosso and the capital, so a trip to Rio de Janeiro would not be beneficial. He considered the Madeira and Amazon Rivers to be very rich in natural species, and so it would be unforgivable to take a different course. In a letter to Mareschal, Natterer presented all these considerations, always focusing on the collection's enrichment of the Imperial Museum of Vienna.



JOSEF SZÉKELY
Gertrude, Baroness Schröckinger von
Neudenberg, born Natterer, on November
15, 1832 in Barra do Rio Negro, Brazil,
copy on albumen paper Vienna,
circa 1880.
NHMW/NHMW

“I got worse day after day, the attacks almost had no breaks, so awful they were that on the eighth or ninth day the fever was so strong that I didn’t move, I could not recognize people, the eyes had no life ”

(letter from Johann Natterer to Baron de Mareschal, Vila Bela de Santíssima Trindade, July 20, 1827).

“The instructions sent to him will not be able to reach him in any way before Pará, he will probably never receive them, or at least cannot execute them, for the resources calculated for him to undertake the river trip cannot be sufficient for the opposite direction ”

(letter from Wenzel Philipp Leopold von Mareschal to Clemens Wenzel Lothar von Metternich, April 23, 1827).

His attitude in favor of continuing his journeys demonstrated how much the naturalist fed his plans to go to the Madeira, the Amazon and the Negro Rivers. All the planning he had previously done, which foresaw the departure to the Amazon in early 1827, had suffered modifications and been postponed. Because of the disease he was still in Mato Grosso, and he could not even leave Vila Bela, because he still had to get the collections he had left in Cuiabá. Moreover, it was necessary to wait for the rainy season, since the Guapore River, which he would sail through was very shallow and difficult to navigate during the dry season.

Natterer departed from Vila Bela de Santíssima Trindade towards Cuiabá on September 25, 1827. The first night camp was at Francisco Xavier's small farm. He traveled the next day, following near Poruti. The temperature was very high, 30 degrees^{TN}, and the recently burned steppes increased the heat. On the way, Natterer and his companions suffered with the drought. After passing through the flat steppes, they eventually had to enter a mountainous forest. They finally reached the Guapore River, where they set up camp in a house by the bridge over the river. It was necessary to stop for a while, as their mules got contaminated with insalubrious water. He took the opportunity to collect some birds. On the 29th, he left the Guaporé River, following through the forest. On the way, he passed the sugar mill of the late Captain Gama. The mill had served as a stopping point on his way to Mato Grosso. He continued walking through mountains, hills, steppes, past areas inhabited by Bororos Indians and Cabaçal, which was inhabited by another group of Indians. He followed Caiá all the way to Caiçara, where he found his collections in good condition. There they had stopped for a week to pick up the boxes. After passing through Vila Maria, near the Paraguay River, they continued their trip. They saw many "fazendas" (farms), such as Fazenda Leita and the Fazenda do Sangrador, which served as a place to sleep and have breakfast.

After his strenuous trip, Natterer arrived in Cuiabá on October 26, 1827. There he received a proposal from Langsdorff - who had been there since January of that year - to proceed the journey together. Langsdorff's plans consisted of trips through the Arinos and Tapajós rivers to the province of Grão Pará, and then for two years by the Amazon and Negro Rivers. It was a plan similar to Natterer's, which considered the advantages of traveling with a doctor after suffering from such a serious illness. Inwardly, however, Natterer considered that this might hinder his freedom of movement. He hesitated to give Langsdorff a final answer.

In Langsdorff's company Natterer also met botanist Riedel and painters Adrien-Aimé Tournay and Hercule Florence, also members of the Russian expedition, as well as his friend Manso. Langsdorff had just returned from his trip to Diamantino, and on the occasion of his reunion, Natterer could finally see the consul-naturalist's collections. They did not make a good impression on him. The objects were badly packed, the taxidermic preparations were rotten, and the drawings were not accurate. Despite his condition, Natterer negotiated with Langsdorff some objects from his collections. He had asked the Russian naturalist for some diamonds from the Diamantino region and some objects he could offer to the Indians he would find near the Negro River. By that time, Natterer also expanded his collection of indigenous words with the glossary he noted with the Guaicurus and Guatós Indians. One who also helped him with the collections was Manso. With the presence of botanist Riedel in Cuiabá, Manso had learned a little about plants and species collecting. With Manso's appointment as director of the city's Botanical Garden, Natterer's friend could then collect plants destined to Vienna.

Two pairs of armbands.

Bororo da Campanha (Biriboné),
Paraguay River, Mato Grosso, Brazil,
circa 1825. Snake leather, feathers,
Max. Length 75 cm.

Natterer Collection.

There are No objects of the Bororo of the São Lourenço River that could serve for a comparison with these "three snake armbands" collected by Natterer among the Bororo da Campanha. The great differences in relation to the falbala of feathers could be a clue concerning the ownership of certain clans. (CF) Weltmuseum Wien



Objections to Langsdorff's work heightened his doubts about the Russian Consul's invitation to join the expeditions. Natterer was only convinced that the joint trip would be advantageous when, the next day, he met Cuiabá's president, José Saturnino da Costa Pereira, to talk about the transport of his trip. The president asked Natterer to travel with Riedel and Taunay, as he would have difficulties organizing two boats for different trips. The Austrian agreed with the proposal, since departure and traveling arrangements would be at his own discretion. The president began preparations, while members of the Russian expedition headed toward Vila Bela de Santíssima Trindade, where they were to wait for Natterer.

In the meantime, Natterer sent a letter to the president of Pará communicating his trip to the province with the mission of organizing collections and asking for his help and protection. He sent in the letter the copy of the ordinance authorizing his travels.

The year 1827 was the one when the traveler finally fulfilled the promise made to José Bonifácio sending duplicates to the Rio museum. He sent a box of 95 copies of 90 different species of quadrupeds, birds and fish. He asked José Saturnino da Costa Pereira, president of Mato Grosso, to send it to Rio de Janeiro.

Although Natterer had written to Mareschal that he planned to leave Cuiabá soon, a foot wound which was very sore kept him there, so he could not return to Vila Bela de Trindade. At that time, he received the tragic news that Taunay, one of the Langsdorff expedition members, had drowned while trying to swim in the Guaporé River in Vila Bela. In February 1828, he learned that Riedel would travel with a dealer, and did not wait for Natterer. Thus, ended the joint travel plans of the two expeditions.

In February 1828, Natterer left Cuiabá towards Vila Bela de Santíssima Trindade. He arrived there in May, hoping that everything was ready for his trip and that he could leave soon. Nevertheless, nothing had been done. He felt he was deceived by Jose Saturnino da Costa Pereira and wrote to Manso asking for help to plead in his behalf. He wanted to be officially notified to have proof of his steps before his superiors. At this point, the Austrian also began to ask for assistance to some acquaintances so that he could make the trip. He wanted to leave as soon as possible, but he felt that the preparations were sluggish. Manso was able to organize new orders for his expedition. However, the trip to the Amazon depended on the Guaporé River navigation and in July news of the river drought circulated. Natterer could only leave in December or January.

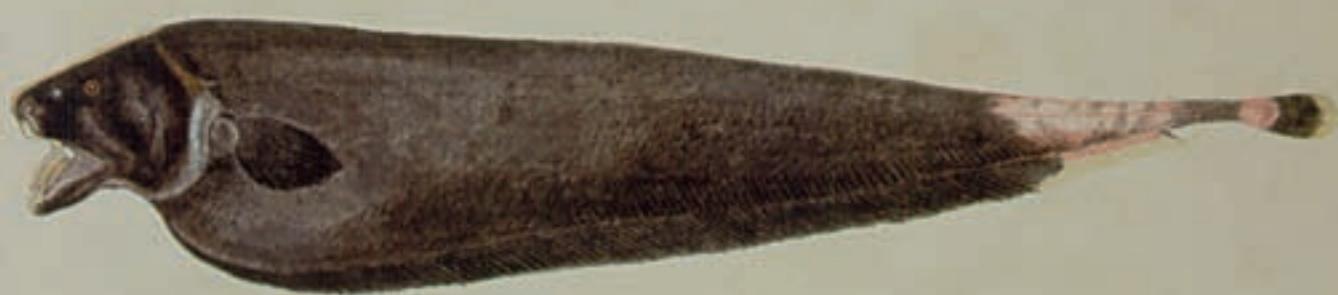
While waiting for the proper time for his departure, Natterer kept on work. He found new species of fish and drew the animals. He devoted himself increasingly to ichthyology. He expected for preparations that seemed to him had not been made, although Manso had acted to increase investment in the expedition. The naturalist also feared for his collections if he remained in the region. With the uprisings of the Spanish-American countries near Natterer, rumors spread about the union between Peru and Buenos Aires, which could result in an invasion of that region by Spaniards. Waiting time kept the traveling plans paralyzed. Natterer could only wait. Meanwhile, he corresponded with friends and worked on his collections. In September news came about Hispanic America. The hostility in the region had been caused by the ouster of Santa Cruz's president. However, another had already been elected, who would make Natterer's passage through the Forte do Príncipe da Beira smoother. The naturalist also received news of a military incursion (Bandeira) by a certain José Gomez da Silva, against the Cabexis Indians who lived near Vila Bela. Natterer asks da Silva, by letter dated October 17, 1828; to bring him not only all the weapons and other utensils possessed by the natives, but also, if "happens that some cabexis got killed in a blast, have a head or two cut off from the Indians already made men, have their brains removed without harassing the hull and dry near the fire so as not to rot them too much [sic]" .

Unable to travel in the drought, Natterer regretted not having boarded with Riedel, who had already departed north. He had trusted that the provincial president would have made all the arrangements, so he had decided not to make any deals with Riedel and Langsdorff. By that time the false rumor came to Natterer that Langsdorff had died. This was cause for concern, as Natterer had left with the Russian consul eight boxes with collections so that Langsdorff could ship to Europe. In November, the Austrian wrote to the consul that he had stayed longer than he had expected in Vila Bela de Trindade, and therefore could not leave until the beginning of the rainy season. It was necessary to expedite preparations for his travels, since nothing had been done. He also asked for news about his boxes.

JOHANN BAPTIST NATTERER
Side view of a Black-ghost,
Apteronotus albifrons
(*Gymnotiformes, Apteronotidae*).
Tovira cavallo / mirim
Man tñhio gaa.
Cuiabá March 13th 1825.
NHMW

“You already know that the Spaniards have made a businessman named Francisco Nunes go back who was going to Santa Cruz, because the commander spoke to the vice president through a messenger. If Peru met with Buenos Aires, as it seems, then we will soon have a visit from the Spanish. The lack of knowledge of these gentlemen makes me fear for my collections, if by chance I still find myself here, which seems to be the case. You may have more details in the news of a rebellion against Bolívar. Nothing is known here”

(Johann Natterer's letter to Antonio Luiz Patrício da Silva Manso, Vila Bela de Santíssima Trindade, August 24, 1828).



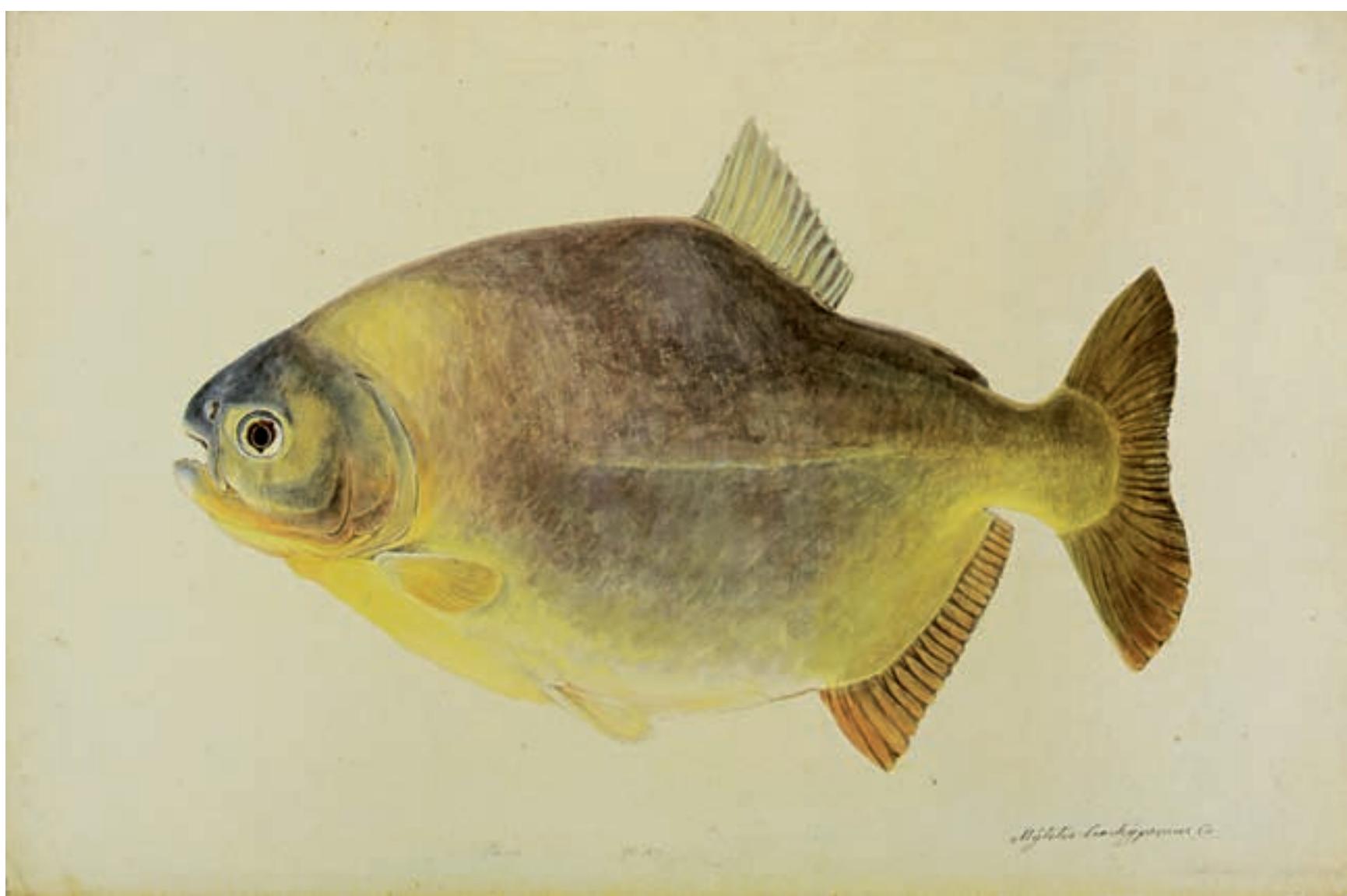
In 1829, Natterer was waiting to leave in March or April, and hoped that all arrangements for his trip had been made by the ones responsible. He worked intensely on this interval with fish and helminths. Nevertheless, in March the boat was not ready yet. He then planned to leave in May. However, still this time the trip was delayed. He received the news that an expedition would depart on March 12 but could not embark on it. He had relied in vain on the vice president's preparations and execution. As a result, he had missed several opportunities to travel with merchants or at least dispatch boxes, instead he continued in Vila Bela. If he could not board soon, he would lose another year of travel. Therefore, he asked Manso again for help and trusted that the doctor would assist him with the expedition. He again asked the surgeon to speak with the vice president, and to explain that Emperor D. Pedro I himself had approved his travel plans and that he was executing them according to the Vienna directives.

Only in July Natterer managed to overcome the impediments and prepare everything for boarding. Meanwhile, by letter, Mareschal justified the delay in his departure: the postponement in preparations, the illnesses of some of his employees, the wait for the Guaporé River flood, and the promises not fulfilled by the vice president. But he also reported that he could considerably increase his collections, mentioning the boxes he had left with Langsdorff destined for Europe. He took the opportunity to arouse the spirit of competition in the authorities, commenting that it would be a shame if the Vienna Museum did not obtain the wealth of the Amazon region, which would be a disadvantage compared to the museums of Russia, as Langsdorff would compose their collections with those riches. He hoped, finally, that the emperor would forgive all the deviations he had made over the years.

If Natterer's travels went through many setbacks, so did the relations between Brazil and Austria after Leopoldina's death. In 1829, D. Pedro I postponed a decision about the question of the Portuguese throne's succession, bothering both Austria and England, as it made difficult to maintain order in Portugal. D. Pedro I further complicated the progress of the negotiations by linking the succession problem of the Portuguese crown to the Vienna court request to find him a second wife. The difficulty of finding a new consort aroused in D. Pedro I the (correct) perception that Austria was not engaged in the matter. That would also concern the question about the succession of the Portuguese throne. Austria insisted on a marriage between D. Miguel, D. Pedro I's brother, and his niece D. Maria da Gloria, D. Pedro's daughter. The Austrian plans were for D. Miguel to assume the regency of Portugal until D. Maria da Gloria came of age. D. Pedro I was still reticent about the marriage, because for one thing he did not want to totally abdicate the Portuguese throne, on the other hand he did not trust his brother as husband and as regent. This political upheaval generated a cycle that alternated perceptions of distance and rapprochement between the two courts of Brazil and Portugal – which in turn, focused on Austria's perceptions of the future of its relations with Brazil. These diplomatic friction between the two countries affected Natterer's situation, which in his critical moments more than once was ordered back home. Finally, Pedro I solved his marriage situation on his own, and this also meant a cooling off in diplomatic relations between the two states.

JOHANN BAPTIST NATTERER
Side view of a Threespot headstander,
Anostomus trimaculatus.
Nº 115, female.
[Vila Bela do] Mato Grosso,
November 22, 1828.
NHMW

JOHANN BAPTIST NATTERER
Side view of a pacu,
Colossoma brachypomum
Pacú, nº 43, male.
Myletes brachypomus Cuvier
Villa Maria, April 1828
NHMW



Seventh Journey: July 15, 1829 to August 24, 1830

In July 1829, Natterer wrote his last notes from Vila Bela de Santíssima Trindade to the provincial vice president, also to his friend Antonio Manso, and to Mareschal. He embarked on a fleet designed to fetch some cannons brought from Belém to Salto Teotônio (near Porto Velho, Rondônia). Natterer would go to Príncipe da Beira Fort, also in Rondônia, and from there he would sail toward the Amazon on the boats that had brought the Belem guns. The fleet given to Natterer consisted of a large boat and two smaller and a 52-manned crew. they were under the command of a sergeant and a quartermaster. Natterer's transportation at this point in the voyage had become quite bulky: the naturalist had prepared 22 boxes of natural history objects collected in Mato Grosso; He also had 25 suitcases, seven bags of personal belongings, and equipment he would carry on the boat.

The excursion along the rivers advanced relatively fast compared to the trip with the mules. However, if the water flow in the rivers was too low or too dangerous, the luggage would have to be unloaded. The same day they left Vila Bela, they arrived in Cubatão, where they stayed for two days. Since leaving, they have faced the difficult sandbank passages along the Guaporé River daily, since the river was very shallow. When they found a bank, the crew had to disembark and the cargo, transporting it through the forest, to recharge it in the boats after passing through the obstacle. The boats were pulled by ropes or even transported by land. These stops, usually near waterfalls, allowed Natterer to hunt and collect new objects. Almost every day you could see dolphins; Natterer collected one of them and a new bird.

In August they reached Príncipe da Beira Fort, where they spent eight days waiting for the boats to be repaired. On the 18th of the same month they left the fort and three days later reached the Mamoré River. Crossing that stretch was dangerous because of the falls. On August 25, they passed by the Guajará-mirim waterfall, where a man drowned. They continued along the river with many waterfalls, which constantly forced the unloading and loading of boats. From there they passed through Guajará-guaçu and managed to take all the load. After much work, they left there on August 31st and followed the river course, passing through the Bananeira, Lages and Madeira waterfalls. The following month, the loading and unloading rhythm continued through Misericórdia and Ribeirão, near the Muras Indian huts, which inhabited both banks of the Madeira River until Borba. There was no close contact with the indigenous during this trip. In his letters, the naturalist only describes their clothes: almost all men wore trousers and some women only skirt, two were completely naked; they slept in small hammocks and built large open huts on very high riverbanks.

Natterer significantly increased his collections. By then he had captured 17 new bird species, 5 quadrupeds, 4 reptiles, and 6 fish, and had obtained some weapons from the Caripunas. The collections were more and more productive, and Natterer described them to his superiors in long lists. But the naturalist, increased distant from friendships he had made in the Mato Grosso region and once again complained of loneliness.

On October 20, they arrived at Salto Teotônio, today located in Rondônia. They stayed there for a few days caulking the ship's boats. Already with a smaller crew in a total of 22 people, they left again on November 8th. After overtaking the last waterfall, they finally reached the Amazon basin where the trip became slower; riverbanks were only wooded and rarely inhabited, and Natterer collected little for his collections. Only at certain intervals could he obtain new animals, such as when they docked at Tamanduá Beach, a small island on the Madeira River, where the naturalist could see the well-known turtles that swam by it.

JOHANN BAPTIST NATTERER
Existing annotations suggest that
they are of the drawing of an imperial
eagle, (*Falconiformes, Accipitridae*),
here represented by a side view.
NHMW

No. 1 *Chiono nifus.*

2600

Mr.

Palaeozoic



After months traveling, they arrived in Borba on November 24, which became Natterer's new base. From there he sent to Pará the 22 boxes with collections through the merchant Matheus Bernardino Vasconcellos. From Pará they would be sent to Vienna via London by the English Vice-Consul John Hesketh, who had also received the Bavarians Martius and Spix. In England, Baron Rothschild would be responsible for receiving the boxes and ship them to Austria. He also requested Manoel Bernardino de Souza e Figueiredo to get a carpenter, a hunter and a fisherman to help him in his collecting activities. His semester in Borba was productive in terms of scientific performance: it gathered enough material for 7 new boxes, with pieces from indigenous tribes, as well as various fish, birds and mammals.

The naturalist decided to stay in Borba during the rainy season to collect new objects from the region such as large fish and turtles. Nevertheless, to Natterer the city was not attractive at all. With the exception of some Europeans, the place was inhabited mainly by Indians, mostly Pamas descended. Natterer described the place as miserable, where little was found to buy even with cash in hand. During the boat trip Natterer enjoyed of good health. However, few days after his arrival in Borba, he began to have fever again and to vomit. Nevertheless, in that region there was no medical attention. During this period, the help of his servants and enslaved Negroes was fundamental for hunting activities, as intermittent fevers prevented him constantly from leaving.

Natterer's plans were to leave from Borba to Barra do Rio Negro (now Manaus) and then take a long journey from there to Tabatinga in the western state of Amazonas. He was already preparing for his next trip. The naturalist expected the rains to stop, which took a long time to happen. He had already organized a support area with Ricardo Zany¹⁴, who promised all support he could possibly give. Zany was a colonel who lived in Barra and made collections for the Rio Museum.

After four years of long silence, Natterer sent news straight back to Austria. In a letter dated June 29, 1830, he explained to Karl von Schreibers the reasons for prolonging his stay in Mato Grosso. He also describes the travel route to Borba, the new collections, and the measures taken to send the boxes by the English. Report to the scientific director of the expedition another list of collections gathered. The last boxes he packed contained 2 pirarucu fish; bows, arrows and Caripunas carpets; poisoned arrows from the Guatias; bows, the Muras' arrows and carpets; manatees; turtles; monkeys, otters and sloths; Mundurukus' bows, arrows, baskets, darts, hats and wind instruments; the Itonomas' hat and nets; the Vauiri-vait's wind instruments, with which they imitated jaguars roar; Jaguar; tapir skins; dolphin; other large fish; stone axes of the Caripunas, Marauás, Parentintins, Araras; arrows of the Matanaus, Araras, and Muras. That was just part of the list of what made up the boxes to be sent by Natterer. As for bird species, he had already gathered 897 and expected to reach the milestone of a thousand species.

Comb (*budega*)
Bororo da Campanha (Biriboconné),
Paraguay River, Mato Grosso, Brazil,
circa 1825. Wood, cotton, length 8 cm.
Natterer Collection.

The same way as their eastern relatives, the Bororo da Campanha combed their long hair with double combs made of palm trunk tips, which were artistically affixed with cotton string to two wooden rods. (CF)

Weltmuseum Wien

¹⁴ Francisco Ricardo Zany, an Italian from the Tuscan region, became Brazilian citizen in 1822, worked as a lieutenant colonel, and in 1831 was appointed intervener of the newly created captaincy of São José do Rio Negro. The Italian-born naturalist contributed to the National Museum in Rio de Janeiro, as well as playing a relevant role in discussions about the treatment that should be given to Indians in Brazil in the 19th century. In 1822, when the Portuguese court was discussing in Lisbon about the government's action towards the Indians, among the five proposals presented in plenary, only Zany's, entitled "Project for the Grão-Pará Indians", and also José Bonifácio's, "Notes for the Brave Indians Civilization of the Empire of Brazil", were put to discussion.



But to his brother, in a more intimate letter, and expressing his true feelings, Natterer confesses the fear that his plans would be disapproved in Vienna. He was disappointed after years and years of dedication to collections, and after the deprivations he went through. He felt weak from illness he had caught, but still wanted to travel and work. He asked his brother to warn him if the authorities in Vienna were considering further orders for his return, for in that case he would have to say goodbye to him forever. He would live the rest of his days in Brazil, where he could easily get a small piece of land, because the land was plentiful, and there he could plant and live.

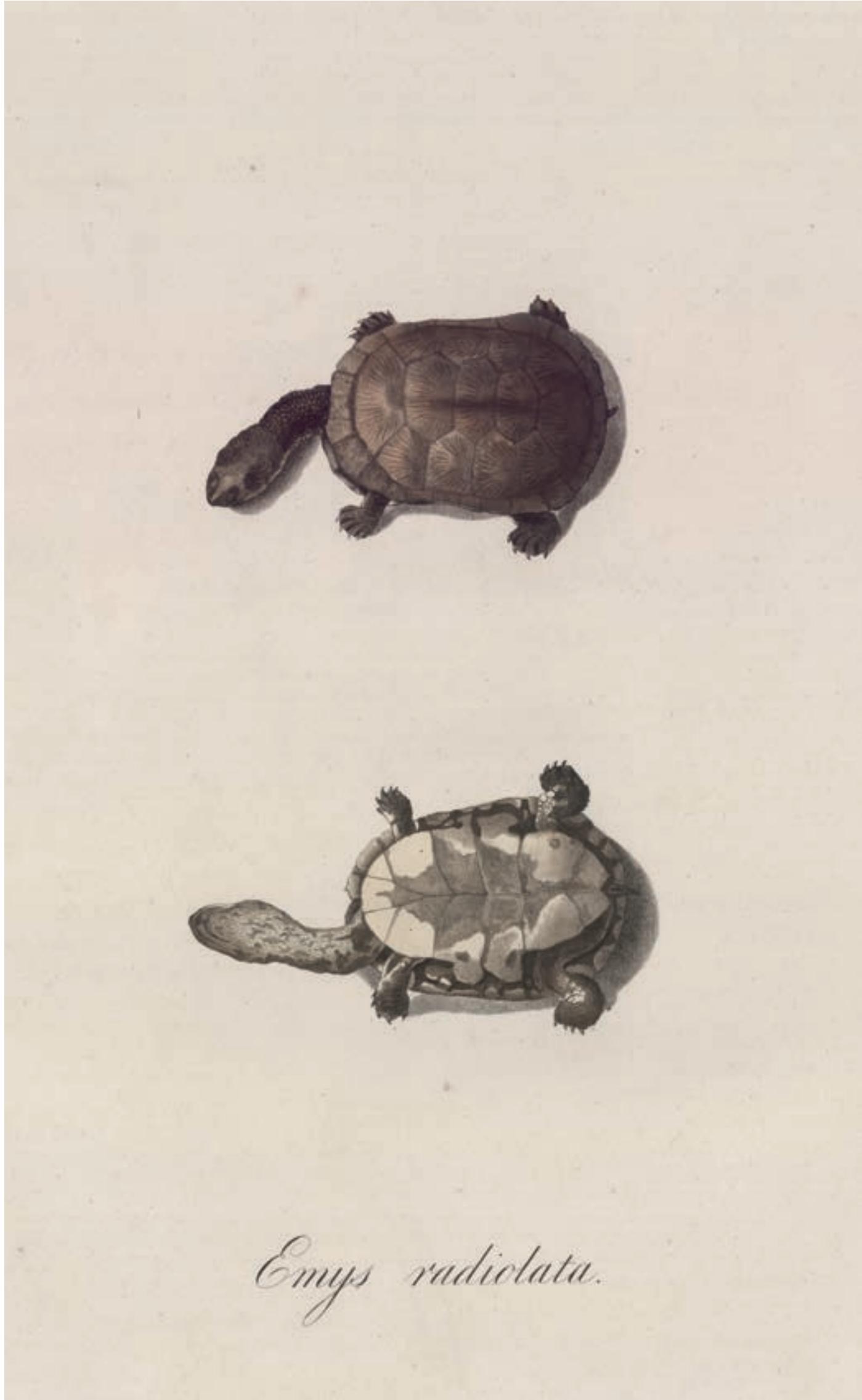
Not only did feelings of disappointment and loneliness show in the horizon of Natterer's momentary concerns. Financial problems persisted at this point of the trip. In December 1829, he wrote to the Baron Rothschild, asking him about a credit he had requested in 1823 while he was still in Cuiaba, but never heard from it again. The traveler was uncertain about his financial situation when he arrived in Pará. He needed some good news because he was running out of money. His Austrian superiors had given him a credit of 4000 guilders under the care of the London consul, Nathan Mayer Rothschild, which would be transferred to Belém (Pará) by the Englishmen John Hislop and John Hesketh. Natterer could only access this new sum, only in 1831, already in Barra do Rio Negro (Manaus).

With the help of local authorities – whom Natterer considered more considerate of his requests than his counterparts in Mato Grosso – the traveler acquired a vessel to Barra do Rio Negro, and departed from Borba on August 25, 1830. He reached the mouth of Madeira River on the 28th, beginning then a long trip by the Amazon rivers.

Natterer's situation in Brazil was less tumultuous at that moment. Notwithstanding, the same cannot be said about the relations between Brazil and Austria in the period. The new marriage of D. Pedro I, which happened in 1829 with Amélie of Leuchtenberg, a princess linked to the French, was disapproved by Metternich. Baron de Mareschal, who had previously been responsible for the marriage negotiations, became persona non grata, and requested his transfer from Rio de Janeiro. His place was taken by Baron Leopold von Daiser, coldly received in Rio by D. Pedro I. The matter of the Portuguese throne's succession also caused friction between the two countries, since D. Pedro I disagreed with the Austrian measures, revoked his abdication of the Portuguese throne and sent his daughter, D. Maria da Glória, to the English, commissioning her to occupy the throne while D. Pedro did not make a final decision. The measure reinforced English and Brazilian relations, which did not interest Austria, and almost represented a rupture between Vienna and Rio de Janeiro. For a few years these political issues had not directly affected Natterer's trips through the Amazon. But Brazil's internal situation was characterized by the emperor's depletion, and Brazilians' discontent with his attitudes increased, especially after the abdication of the Portuguese throne was revoked. With the increase of his unpopularity the emperor abdicated the Brazilian throne in 1831 and went to Portugal, leaving as his successor his son Pedro de Alcântara, he barely was 5 years old. The intensification of the spirits between Portuguese and Brazilians in northern Brazil undertook the dimension of a civil war a few years later, that would affect the fate of Natterer and the Austrian expedition in Brazil.

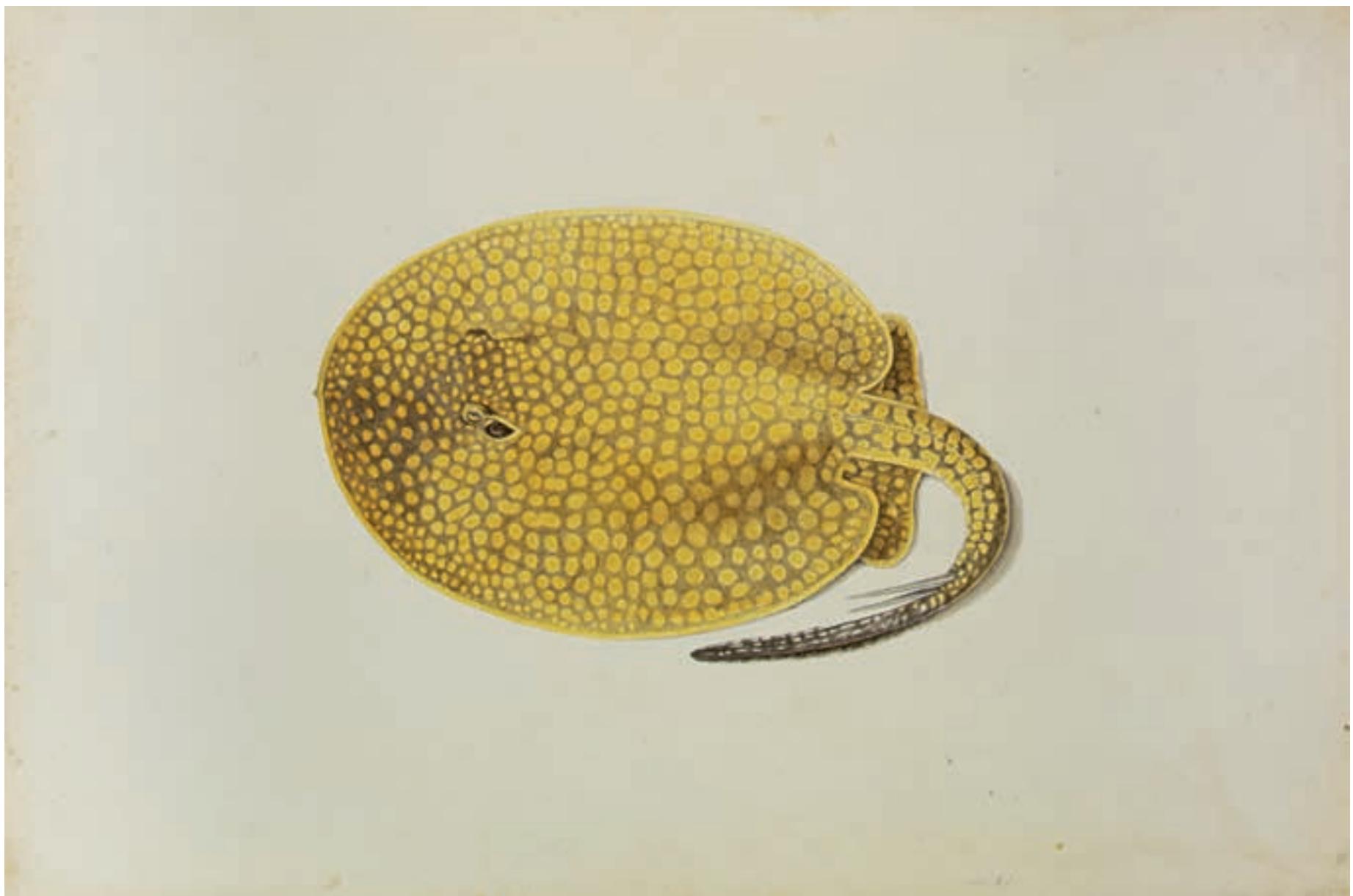


JOHANN BAPTIST NATTERER
Detail of the head of a britango
(Egyptian vulture),
Neophron percnopterus
(Falconiformes, Accipitridae).
NHMW



JOSEF BRUNNER
Ludwig Erminy, *Emys radiolata*,
Hand-colored lithograph.
NHMW

Emys radiolata.



JOHANN BAPTIST NATTERER
Dorsal view of a smooth back river stingray,
Potamotrygon reticulatus
(Rajiformes, Dasyatidae).
Raia, *Ma ko*
Cuiabá, August 1824.
NHMW



JOHANN BAPTIST NATTERER
Dorsal view and detail of fins
pelvics of a large black river stingray,
Potamotrygon Motor
(Rajiformes, Dasyatidae).
ocellate river stingray
[Vila Bela do] Mato Grosso,
August 8-9, 1828
NHMW



Clarinet (*boali*).

Bororo da Campanha (Biriboconné), Paraguay River, Mato Grosso, Brazil, circa 1825. Ox horn, cane, vegetable fibers, cotton, and human hair, max. length 19.5 cm.

Natterer Collection.

The musical instruments, called "horns" by Natterer, due to the material of his pavilion, and used by both the Bororo and the Bororo da Campanha as well as the Boroboro do Cabaçal, were clarinets, which name points to their origin of Bottle gourd Clarinets (Eastern Bororo *powári*, "bottle gourd"). Its use, however, was not ritualistic. "They play the instruments to communicate and when they are traveling." The Bororo of the São Lourenço River were unaware of this instrument. (CF)

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Hair Adornment stretcher (*ae-ae*) and wrist protection (*ae*).

Bororo da Campanha (Biriboconné), Paraguay River, Mato Grosso, Brazil, circa 1825.

Horsehair, resin, vegetable fibers, human hairs, length 55 cm.

Schröckinger Collection, (ex-Natterer Collection).

Human hair torn or plucked out in the funeral rituals' context were turned into head adornment similar to wigs and long twine by the Bororo da Campanha. Wrapped around the wrist, they used to protect the wire from the bow that hit back as soon as the arrow was thrown. Among the Eastern Bororo, its use was restricted to the hunter, who sometimes as the deceased's representative vindicated the loss suffered by the grieving relatives killing a jaguar. The optional use of horsehair and horse tails can be observed only between

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Artifact to sharpen Arrowhead (*duga barega*) and snail shell with planer.
Bororo da Campanha (Biriboconné),
Paraguay River, Mato Grosso, Brazil,
circa 1825. Rodent animal teeth, cotton,
resin, palm leaves, snail shell. Max.
length 27.5 cm.

Natterer Collection.

A sharp tooth of capybara or other
rodent animal, affixed on a piece of
wood, served for the Bororo men as a
multipurpose tool, because it not only
sharpened the arrows tips, but also
flattened the wood. For each tool there
was a cable from Bacuri palm tree, which
served to sharpen the teeth.

The woodworking tools were
complemented with a snail shell, which
served to flatten as well as smooth the
arrows' cables. (CF)

Weltmuseum Wien

Stone Axe Blade. Pama, Madeira River,
Central Amazon, Brazil, circa 1830.

Pedra, length 18 cm.

Natterer Collection.

Natterer found the present blade in
Borba, along the Madeira River, where
it remained for some time. Some of the
Pama's "descendants" lived there – which
to the extent that Natterer could observe
– spoke only their lingua franca and
Portuguese. (CA)

Weltmuseum Wien



Eighth Journey: August 1830 to August 1831

Natterer reached the mouth of the Madeira River on the 28th. The waters rushed toward the Amazon River, where a beautiful view of the Amazonian stream stretched across an eastern bay, with forest peaks on both sides. There were many porpoises, but it was difficult to capture them. Due to the current, the trip through the Amazon was slow. Along the river, the expedition passed by huts of different indigenous groups. On the 29th, his team entered the strongest flow of the Amazon; the oars did not help navigating, making the journey difficult. They headed north on the bank of the Ilha dos Macacos and stayed in front of the mouth of the Uautá River. They spent two days on the island and set out on the 31st. A breeze was blowing, which then intensified with time. There were no islands on the widest stretch of the river. They sailed north in dark brown waters. On September 1st, they passed a marshy spot on an island where they spotted flocks of orioles' birds. The naturalist caught some in order to increase his species listing. On the 5th they arrived at the Ilha do Lago Real. The next day, they passed by the mouth of the lake, where there was a factory for bathing and salting pirarucus. In the afternoon they reached Puraquêuara Island and continued north. One could often see porpoises and turtles.

On September 8, 1830; after a few days of favorable winds, they arrived at the mouth of the Negro River. Natterer advanced on his plans without worrying about obeying Vienna's orders. They navigated toward the north bank, occupied by country houses. With the wind help, at 11 o'clock they were able to land and prepare something to eat in a dwelling place. In the afternoon they resumed navigation and, after a few hours, arrived at Barra do Rio Negro, a small fort built on a rocky bank of the coast. There he received the cordial welcome from the general ombudsman, Manoel Bernardino de Souza and Figueiredo, and from the military commander, Colonel Joaquim Felipe dos Reis. He appreciated the ombudsman's reception and planned to leave some of his things there when he traveled through the Amazon River until the border at Tabatinga. There was more time to prepare travel arrangements. Thus, the naturalistic traveler would be ready to sail again in early November of the same year. The rainy season began, and due to the high current, the trip to Tabatinga would take 3 to 4 months. The traveler consulted others who had already taken this journey - such as Colonel Ricardo Zany - for guidance on that excursion. The colonel discouraged him from going to Tabatinga during this rainy season, suggesting that he should go up the Negro River, which would be less dangerous. Natterer heeded his suggestions and changed his plans.

During his stay in Barra, the naturalist collected the largest number of zoological species, including mammals, amphibians and birds. The traveler stayed for a while in Barra do Rio Negro until October 1830. There he communicated with the provincial president of Pará, among others, to talk about the dispatched boxes. He complained about customs inspection procedures, as there were collections intended for the Emperor of Austria and opening them could damage the material.

On the morning of November 5, 1830, Natterer and his team finally left Barra do Rio Negro. The favorable gust made it possible to use the sails, and soon the expedition passed through Tarumas. The next day the river became narrower and rockier. They continued navigating on the right bank. It was rare to see caimans, so common in the Amazon and Madeira rivers. Throughout the tour, he captured new birds for his collection. On the afternoon of the 14th, they passed by the small town of Airão, consisted of 9 or 10 thatched houses and a church. They headed for the mouth of the Jaú River, where a storm stopped them. They reached, on the 18th, the village of Moura, called Pedreira. It consisted of 30 to 40 palm-covered houses and a church.



Two feather headdresses
Bororo da Campanha, Brazil, circa 1825.

Natterer Collection.

Natterer calls these feather appliques "two headdresses. One adorned with a feather of the Royal Hawk (Falco destrutor [is missing]). It is tied to the head – *kurugá Baré-Enau*". *Bóé etáu* means "head ornament" among the Eastern Bororo, *kurugúwa*, the yellow-headed caracara; the possession of certain feathers of different species of hawks means among them a privilege granted to clans Specific. The pieces collected by Natterer resemble clearly the hair clips in flower format (without hawk feathers) called *péku* of the Eastern Bororo, which are, in the black or yellow versions, property of the sub-clan *Jebáge Cebegiwiúge cebegiwiúge*. (CF)

Weltmuseum Wien



Arrows with bone tips (*dögöla*) and Cane tips (*döga, Duga, Köka, Tschora*). Bororo da Campanha, Rio Paraguay, Mato Grosso, Brazil, circa 1825. Cane, wood, feather, vegetable fibers, resin, cotton, max. Length 229 cm. Natterer Collection.

The Two types of arrowheads of the campaign Bororo, both with bone or wood tips and tangential emplumation (preferably for bird hunting and small animal hunting), or the ones with cane spikes and radial emplumation (for the hunting of large animals and for war), resemble those, which were later also found among the Bororo of the São Lourenço River. They were, however, half a meter longer, and at least those found by Natterer did not show any specific signs of claws. The radial emplumation with fixation by means of sewing is also unusual. As the arrows of the Cabaçal Bororo came from war booty, they represent more the second type of arrow, but have a cane rod very short and show, besides the fixation by sewing, also the fixation of feathers by wrapping of both extremes, in which one of the blades is cut, most of the time from toothed wood. The different forms could be indicative of the heterogeneity of the western Bororo. (CF)

Weltmuseum Wien

Under heavy winds and rain, they reached the village of Carvoeiro on the night of the 20th, composed of some ruined huts. Natterer tried to find judges or militia commanders there; but the inhabitants were a few days away from the coast in their plantations. He found only two men; with one of them he traded a tortoise. On the 27th went through Poiaraes, a small village. Finally, on the 29th, they arrived to Barcelos under heavy rain. This village had been the capital of Rio Negro captaincy and the government headquarters. Formerly Barcelos had housed large barracks; a palace for the governor; a building that served as the headquarters for discussions between the Portuguese and the Spaniards, with the purpose of delimiting the boundaries of their respective domains; and many large houses. The transfer of the Rio Negro district administration to Barra do Rio Negro (now Manaus) has resulted in a devastating decline in the village of Barcelos and other towns and cities on the banks of the Negro river.

After a day's stay, the traveler organized his team and traveled on November 30, 1830.

In the following weeks he went up northward along the Negro River. On December 3, they passed by the village of Moreira, which consisted of a dozen houses and a church. The village was inhabited by the indigenous groups of the Manaó, the Baré and the Jurupixuna. They proceeded through the islands and shoals on the river. In this route it was rare to see ducks, pelicans or even other birds. On the 6th they reached Thomar, the last village along this river, a decaying place like all the others. On the 7th, they passed Lamalonga, another small town completely abandoned. A northern storm forced him to stay there for a few hours. Once the heavy rain ended the journey advanced, passing through small forests and mountain peaks. The sailing routine was always the same - the crew had to row, pull the boat with ropes, camp at night, beat currents and go rowing. On December 10, they moved to the left bank and arrived at the residence of the upper Negro River militia commander, Lieutenant Colonel Julio Manoel da Fonseca Paixão. He presented Natterer with three blowpipes from the Padaviri River Indians.

On the 14th they reached Santa Isabel. For two days Natterer waited for two oarsmen and a pilot, because with the rise of great currents it was required the presence of experienced navigators. On the 20th, they had breakfast in the village of São Antonio do Castanheiro Novo - which consisted of a small church and two houses. Other houses were still under construction. Along the Negro River, the ship crew could see the river many tributaries and villages on its banks. On January 1, 1831, they reached Cajubi Waterfall. In order to get past it, they had to unload the boat, pull it with a double rope and then reload it again, and then proceed with the navigation. The next day they all arrived at the fort near São Gabriel, where Natterer ordered them to port and fire 21 musket shots to greet their arrival. He was cordially received by the commander, the captain, the judge, and a tenant. During the day, he visited the commander's house, but didn't spend much time there. At night he returned to the boat, as he wanted to resume the trip the next day. On the 8th, they arrived at Santa Barbara, a small village where the Vaupés Indians dwelled. Two days later, they arrived in Santa Anna, in the Baniwas' region.

On the afternoon of January 16, 1831, they could see Forte São José de Marabitanas, in the region bordering Brazil, Colombia, and Venezuela. Natterer saluted the Brazilian flag with 21 musket shots. He was received by the commander, an artillery lieutenant, and escorted to his residence. There the traveler could accommodate himself and so he did, leaving his luggage the next morning. The proximity to the border caused in the naturalist a strong eagerness to make excursions in the region. He was very close to the Cassiquiare River, scientifically explored by Alexander von Humboldt 30 years earlier. He acquired permission from the ombudsman and the commander, and, in the company of two other men they left Marabitanas on February 4. The following day in the morning, they passed by Cucuí, on the left bank of the Negro River. They made some excursions to the mountains of the region going through a dense forest, guided by Indians who opened paths with domestic knives. Animal collecting there was not very fruitful.

Nape Adornment
Mainatari, Guaianas, Brazil, circa 1830.
Feathers, parts of dried bird skin, wood,
vegetable fiber, length 67 cm.
Natterer Collection.
According to the French ethnologist
Philippe Descola, the use of feather
adornments is also a way for men, who
belong to different indigenous groups, to
be able to differentiate from each other.
Contrary to what happens to animals,
in the human body, in principle.
There are only a few differences.
Feather ornaments, body adorning made
of animal teeth, but also body painting
itself make appear external differentiations,
which turn into a sign of ethnic identity.
(CA)
Weltmuseum Wien



On the 12th, he left Cucuí and received from his fisherman two samples of the urumutum bird. The next day they were back on the river on their way to São Carlos, where they moored at the end of February 15th. Two and a half hours away from there was the mouth of the Casiquiare River, which connects the Orinoco River with the Negro. Natterer went there on the 17th, but the place did not bring him much Profit. He returned with the team to Marabitanas the next day. Back in the fort, the naturalist worked hard on his collections, and sent to Vienna a long list of the collected objects. On May 26, 1831, the group headed south, where they spent most of their time for the following three months.

Because he had been so far from the political centers, Natterer hardly received information about the relations between Brazil and Austria. After the departure of D. Pedro I from the country, the Austrian interest was restricted to the welfare of the royal family because the emperor's son, the boy D. Pedro de Alcântara, was still a child and was left in the country. With the diminishing political interest in Brazil, the Austrian authorities were unhappy with Natterer's presence in the country. In May 1831 they sent the explorer orders to return to Vienna, along with a warning that he would no longer receive funding for his travels. The request did not have much effect, as Natterer was in a difficult-to-communicate location. At this point he made decisions for himself, without worrying (much) about his superiors' orders.

Bows and arrows.

Munduruku, Parintintin, Tapajós River, Brazil, circa 1830. Tube, feathers, vegetable fibers, wood, bamboo, max. length 203.5 cm.

Natterer Collection.

As war arrows they must have been obtained from the Parintintin, who maintained war relations with the Munduruku, Inv. Number 1.199.

However, they are called Obram, Munduruku poisoned arrow of war. According to Martius, the Munduruku did not prepare the poison for the arrows, they negotiated it with neighboring groups. This shows that the warrior nature of the Munduruku also had the ability to communicate peacefully, as a prerequisite. The inv. numbers 1.194 and 1.1965 is a hunting archery (*uup*). Much of the Munduruku ritual efforts revolted Circa the idea of "mothers", who had the hunting animals under their care and whose affection needed to be gained, so that she would grant to humans the right to prey. This concept was so far away that in the ritual the warrior Munduruku even transformed himself into "mother", which could fulfill the desire of hunting. The head-hunting ritual began in the rainy season, when, effectively, enormous herds of white-lipped peccaries often approached the settlements. In the hunting ceremonies itself, the "animal mothers" were invoked in skulls of animals aligned and regaled with manioc root. (WK)

Weltmuseum Wien



Ninth voyage: September 1831 to August 1832

From Marabitanas, Natterer and his team went again to Barcelos. Unfortunately, little is known about his stay at the fort and further trips. In many of his letters, the naturalist traveler described his itineraries and collections, some more detailed than others. These notes represented the reports he was to send to his Austrian superiors, reporting his activities in Brazil. The intense dedication to the collections and the little appreciation for writing left no room for the naturalist to create a traveling journal through which we could now follow his steps throughout Brazil. Even letter writing did not take place at a systematic pace even in the last years of the expedition. We know that – from some recorded letters and one of the last one to Schreibers – after leaving Marabitanas and before returning to Barcelos, in more than one trip along the Negro River, he established several contacts with indigenous groups. The traveler gave a description of these groups, and listed the objects he obtained from them, as well as citing the tributaries of the Negro River through which he navigated.

Initially, Natterer and his team headed to the Xié River, where they sailed for five days to a village inhabited by the Barés and Uerequenas. Then, at the beginning of June, they crossed the São Carlos region. They continued through São Marcelino and Nossa Senhora da Guia, where the traveler aggregated his crew in order to sail the Içana River. On June 9 they followed the same river, much wider than the Xie. They only reached Tunui waterfall on the 22nd. A few years earlier the region had been inhabited by the Baniwa, who were now scattered. Still the naturalist tried unsuccessfully to contact another village. He sent his pilot with some iron utensils and glass beads to exchange for some weapons and other local Indians' goods. To the chief, Natterer sent a large knife, inviting him to visit him in Tunui. But the chief couldn't attend, apologizing for not knowing Portuguese. He returned the gifts by sending Natterer a black cock. The pilot managed to negotiate some bows and blowpipes and two sacks of flour. On the way back to the Negro River, the expedition visited four Baniwas villages. The Austrian watched dances, bought his musical instruments, nets, bows and arrows.

On June 30, they continued their journey, and along the way they passed by São Felipe, Santa Anna and São Joaquim, on the banks of the Vaupé River. He visited the Indian groups Coihoana, Tariana, and Tukana. The meetings were quick, and Natterer obtained by negotiation indigenous objects. On July 9 they sailed the Tiquié River, which banks were inhabited by the Mukunas and the Mehóanas. On the 11th they reached São Jerônimo, near the Panoré waterfall, which some of the few inhabitants were the Tarianas and the Tukanas. He stayed there for a few days and met with several native populations. Natterer acquired several ethnological objects that were sent to Vienna. When departing the Vaupé River, the expedition sailed towards the Curicuriari River. Without further long stays, they continued their journey until they came back to Barcelos on August 20, 1831.

Head Adornment

Ticuna (?), Western Amazon, Brazil, circa 1830. Feathers, vegetable fiber, h. 80 cm.

Natterer Collection.

The Ticuna live in the border region between Brazil, Colombia, and Peru, and nowadays are among the largest indigenous groups in the Amazon. In the 18th century, they could be found, above all, in the upper tributaries of the Amazon, since the banks of this river were colonized by their enemies, the Omáguas. The Omáguas, however, have ended up victims of numerous epidemics, and the Ticuna have thus advanced to the region now they occupy. Johann Natterer himself, never visited the region of the Upper Amazon. He probably acquired the Ticuna's objects in Manaus through third parties. In this process, it may also have come to the wrong classifications sometimes: assigning this head adornment to the Ticuna, for example, is questionable. Stylistically, it corresponds long much more as objects of the Culinos, a group of indigenous peoples of the *Pano* language that inhabited the region and at the time were neighbors of the Ticuna. (CA) Weltmuseum Wien





It was in this city, and this year, that the Natterer married Maria do Rego, a Muras Indian descendant, with whom he had three children. One daughter was named Gertrude in honor of the woman who took care of him when he was seriously ill in Mato Grosso. Unfortunately, there is no detailed record about the marriage.

Only when he arrived again in Barcelos did he become aware of the orders to return to Vienna. But it was too late. Baron Wenzel von Mareschal at the time was no longer the one in charge of Austrian business management in Rio de Janeiro, having been replaced by Baron Leopold von Daiser. Even without knowing the whereabouts of the traveler, Mr. von Daiser defended Natterer's collecting activities before the Austrian authorities. Natterer thanked him by letter. News about the political events in both Brazil and Europe reached Natterer with too much delay, with few details and some rumors.

However, the naturalist wanted to stay away from these movements. His next destination was the Branco River, where he left from Barcelos in September 1831. From this ninth trip there are few records. In his few notes, it is possible to identify the passage through the extinct Fort of São Joaquim and then continued by the Tacutu, Uraricuera, Mahu and Pirorora Rivers. In May 1832 the group left the Forte do Rio Branco, and on August 1 returned to Barra do Rio Negro (Manaus).

Rattles

Tukano, upper Negro River, Brazil, circa 1830.
Bottle gourd, wood, fruit grains, seeds, dye,
max. length 40 cm.
Natterer Collection.

The Rattle is among the seven objects that according to the myth of creation appear along with the "grandfather of the Universe", from the middle of the darkness to then reach the world. In the context of the ritual, rattles like this are used by people of all age groups in order to mark the rhythm during the ceremonial dances. They are carved with a knife from a neck bottle gourd and, with the painting of white signs, "Awakened to life". In the present type, a painting with the designation of "rubber tree twig" is engraved in the bottle gourd and finally filled with white liquid clay. In the Tukano's society, technical and symbolic competencies go hand in hand. The ability to fabricate objects points to spiritual maturity, which is why those who make them most often are guides or ritual specialists. (BC) Weltmuseum Wien

Quiver for blowgun arrows

Tukano, Uaupés River, Brazil, circa 1830.
Vegetable leaves, tree resin, wool, tucum fibre,
bottle gourd, max. length 53.5 cm.
Natterer Collection.

In quivers like these were transported arrows to hunt birds, which in Natterer's times they were used in combination with the blowgun. With the appearance of Western goods and values, however, practical hunting methods and also the social insertion of this activity have changed dramatically. Hunting and fishing are nowadays a purely individual issue, which is why their income is also minimal. Although quivers are still today estimated for their symbolic value, they are hardly still used in hunting. Most of it is produced for the tourism market, which becomes increasingly important, in which the quivers are sold as souvenirs. (BC) Weltmuseum Wien

“I read the news of credits opened for me in Pará with great joy, and with real gratitude for the manifestations for my health and also for the flattering and friendly involvement with my destiny, and I deeply regret that fate has not given me the fortune to offer Your Excellency personally my warmest thanks, and to enjoy the most distinguished honor for which Your Excellency are known”.

(letter from Johann Natterer to Baron de Daiser, Barcelos, 25 August 1831)



Tenth Journey: September 1834 to September 1835

Now back in Barra do Rio Negro in August 1832, Natterer found many changes. The Rio Negro district separated from Grão-Pará, establishing its own province. Manoel Bernardino de Souza e Figueiredo was elected president and sought to calm down the heated spirits between Portuguese and Brazilians. The latter had a growing hatred for the Portuguese. For years Northern Brazil had been disconnected from the country's political center. They were slow to recognize the nation's independence and Brazilians were dissatisfied with the fact that, after ten years from the end of ties with the metropolis, many Portuguese still held positions in provincial governments.

Belém sent troops to restore political order, and the two provinces got into conflicts. To escape the situation, Natterer fled in August 11 to Taruma, the head office of a former governor a few miles above the Negro River. He returned to Barra do Rio Negro only on the 21st, when the political turmoil had already calmed down. There is little information in the following years about Natterer. In 1833 Metternich received no news from the naturalist. Nor are there letters from 1834. Only in a letter written in 1836 to an unknown consul did Natterer quickly trace his course.

In October 1832 Daiser sent him emphatic orders to return to Vienna. The Austrian authorities no longer had patience for Natterer's delays, as they expected him to be in Europe again. However, a quick return was impossible due to the conflicts occurring in the region. Natterer had to go to Pará (name of the city of Belém at the time) to board to Europe; but there were reports of intense clashes in that region, and 200 Portuguese had been murdered in Pará. Under these circumstances, it was not advisable for the naturalist to go there. Only on May 13, 1834, after recovering from an illness, Natterer was able to leave Manaus. In September of the same year He arrived in Pará, where he found a situation of conflagration and war.

The popular uprisings were happening there in the most intense way. The friction between Brazilians and Portuguese had already shown its signs in 1831, when a Regency was installed in the country after the emperor's abdication. It is true that the regents granted the provinces more autonomy, but this measure eventually encouraged disputes among regional elites for the local powers control. Besides, the situation of most of the population was critical. Indians, mestizos, and slaves lived in miserable conditions. Because of that, large sections of the population decided to join the local elites against the Portuguese-dominated government. These elites aimed to affirm Pará's interests before the Brazilian central government, and partly to address regional people's poverty, most of whom lived in mud huts – from which the name of the revolt originated. In 1835 the cabanos invaded the capital and executed the provincial president. A new government has been established. This riot was followed by several others in a succession of conflicts. After five years of repression and clashes, the *Cabanos*^{EN} were finally defeated by Regental government troops, ending a major political conflict that resulted in tens of thousands of deaths.

In a certain moment, the constant friction between Brazilians and Portuguese turned into hostility to all foreigners, which forced Natterer to suddenly halt his journey through Brazil, and to swiftly escape on an English ship moored on the shores of Belém, leaving behind many collections he had made that were still boxed. On November 9, 1835, he arrived in London, where he remained for some time to restore his health and organize his collections. Natterer left the English capital in the following year, arriving at last in Vienna on August 13, 1836; along with his wife and daughter Gertrude. With the return of its greatest protagonist, the Austrian scientific expedition in Brazil finally ended (1817-1835).

JOHANN BAPTIST NATTERER
Side view of a surubim
(Tiger shovelnose catfish),
Pseudoplatysoma fasciatum
(Siluriformes, Pimelodidae),
in proportion to an Austrian
inches scale sketched by the artist.
Nº. 1 and number 29, painted *Silurus*.
Cuiabá, January 1824.
Viennese inches 2
D[orsal] 7, c[audal] 17, a[nal] 12,
v[entral] 6, p[ectoral] 1/8, b 13.
Manjoð
NHMW

JOHANN BAPTIST NATTERER
Vista lateral de um tucunaré,
Cichla ocellaris
(Perciformes, Cichlidae).
D[orsal] 15/32, c[audal] 17, a[nal] 3/4,
v[entral], 1/6 p[ectoral] 14, b 5.
nº 72, *Cichla monoculuz* Spix.
[Vila Bela do] Mato Grosso,
1 de julho de 1829.
NHMW

EN Editors' note
Cabanagem was the popular revolt of the regency period, which occurred among the years 1835 and 1840 in the Grão-Pará province (today, state of Pará, North region of Brazil), it had received this name because of the many rebels who lived in huts (*cabanas*) on the banks of rivers. They were called of *cabanos*.



Cichla maculata sp.

Back to Europe

In Vienna, Natterer resumed his work as a zoologist. The extensive collections produced over 18 years of travel had to be organized and described. The material collected gathered a huge amount of research objects for numerous areas of natural sciences, as well as an amazing number of ethnological objects. There were a total of 430 mineral species; 1,729 jars with helminths; 951 shells; 73 Mollusks; 409 crustaceans; 32,825 insects; 1,621 fish; 1,678 amphibians; 12,294 birds; 1,146 mammals; 125 eggs; 192 human and animal skulls; 138 types of wood; 242 seed samples; 216 coins; more than 1,700 indigenous objects (ornaments, weapons, utensils, clothing) from over 70 ethnic groups.

Natterer also stood out through some scientific works, such as the *Lepidosiren paradoxa* (1839) and the *Beiträge zur näheren Kenntniss der südamerikanischen Alligatoren* (1840), published in the annals of the Naturhistorisches Museum Wien (NHMW). After his homeland return, he began to develop international contact and cooperation activities, through travels all over Europe between 1838 and 1840. In Germany, Denmark, Sweden, France, Holland and England the naturalist visited museums, exchanged collected materials, complemented his studies and collections, and met other scientists developing extensive networks of scientific collaboration.

But at the Imperial and Royal Natural Objects Cabinet little has changed for Natterer. Upon his return, he was assigned to the same post he had held 20 years earlier: associate assistant in the zoology department, headed by his brother Joseph Natterer. The naturalist felt devalued after 34 years of service to the emperor and 18 years of hard work in Brazil, where he suffered many hardships and nearly met death. Natterer's recognition came from abroad. In 1822, still in Brazil, he had been appointed correspondent member of the Senckenberg Nature Research Society (SNG) in Frankfurt; He later became a founding member of the Societe Cuvierenne in Paris, and of the Gesellschaft naturforschender Freunde in Berlin. In addition, he received an honorary doctoral award from the Faculty of Philosophy at Heidelberg University¹⁵.

Although back to Europe, the ailment adversities did not abandon Natterer. The illnesses he acquired in Brazil led to chronic diseases that affected him until his death. Natterer still endured for some years the consequences of his liver disease, but in 1843, due to his weakened condition, he passed away due to pulmonary congestion. With his decease, some of his works remained unfinished, such as his treatise on ornithology.

Her young wife also suffered in her new continent for not enduring the cold European weather, which was so brutal to her. She died prematurely on December 8, 1837, at the age of 30. Before she died, Maria do Rego gave birth to a boy who also died three months after his mother as a result of pneumonia. Only little Gertrude survived, having lived until 1895.

Clay bowl and ceramic vase.
Baniwa, Içana River, Brazil, circa 1830.
Clay, dye, h. 26.5 cm.
Natterer Collection.
Clay bowls painted from the Baniwa [carútana, karútana, karutana] of the Içana River and vases of painted ceramics from the Baniwa of the Guainia River. The last piece was acquired in San Carlos, on the upper Negro River. (KPK)
Weltmuseum Wien

¹⁵ SCHMUTZER, Kurt. *Der Liebe zur Naturgeschichte halber: Johann Natterers Reisen in Brasilien 1817-1835*. Wien: Verlag der Österreichischen Akademie der Wissenschaften, 2011, p. 251.

“On March 30, 1837 she gave birth to a healthy boy. In late pregnancy she always had severe pain on the left side, of her diaphragm region. Nevertheless, the doctor did not want to bleed her and after the boy’s birth her situation worsened. In addition, a strong cough began, and the doctor feared a nodular tuberculosis. But with the spring arrival she recovered, and it seemed like she was getting better. At the end of August, I had to go to Karlsbad and sent her to the camp. However, the fall with cold temperatures was very detrimental to her. She returned to the city and when I returned from Karlsbad on October 2 I found her in bed and in bad conditions. Tuberculosis had developed and was advancing rapidly. She grew thinner at bare eyes and on December 8, the poor thing passed away; she who had accompanied me to this point, to find here an early death in our inhospitable climate”

(letter from Johann Natterer to Carl Hocheder, Vienna, December 30, 1838).





Children's shirt.

Baré. Marabitanas, Negro River, northwest
of The Amazon, circa 1831.

Vegetable wool, l. 67 cm.

Natterer Collection.

The child's shirt of this illustration also
shows that the women of the Baré used
European techniques, although artistic
donations like this do not allow conclusions
about the degree to which the Baré adapted
in its culture to the urban population.

Nowadays they form the core of the
accultured indigenous population in various
places of the middle and the low Negro
River. (CA)

Weltmuseum Wien



Übersicht des Gehaltes der aus Brasilien während den Jahren 1817 K. K. Naturforschern eingeschickten einzelnen Sondun

Wim in Januari 1837.

1817 bis 1836 von den
Jungens.

Abteilung	Jahr.	Stoffen und Geräthe	Samen	Pflanzen	Holz, mindeste, Mineralien, Münzen	
				171	2400	18
				170	1758	338
				115	29,988	140
						3926
						60
						4954
						54
						4
						66
						50
						8
						28
						15
						8
						127
						74
						47
						263
						17
						150
						10
						474
						150
						10
						450
						60
						196
						17
						3087
						26
						6467
						192.
						125.
						1650.
						719
						43,700.
						337.
						4910.
						216.
						<i>Jos. Natterer Custos</i>

Wanderings of a collector. Natterer's records in letters, journal and notes.

Luiz Barros Montez

Overview of the content of shipments sent from Brazil during the years 1817 to 1836 by imperial naturalists, Vienna, February 1837, of curator Joseph Natterer. On the left, the names of collectors and the dates of the consignments. Next door, the respective number of objects, starting with mammals and ending with coins. NHMW

I. Writings and its inquiries

Naturalist-traveler's letters, journals, and field notes are essential documents in a historian's opinion, especially for the reconstitution of his scientific motivations, the collector's objectives and work methods, his challenges and his personal achievements. But they are more than that. When correlated and associated with other available sources whether institutional or private, these documents allow us to go far beyond the ordinary description of the singular – and sometimes "heroic" – pathway of an individual.

From this point of view, the textual legacy of Johann Baptist Natterer (1787-1843) is complex and plentiful in interpretive possibilities. Natterer is an Austrian scientist who, from his position as a prominent member of the Austrian scientific expedition that accompanied Leopoldina's arrival in Brazil – after the return of almost all the expeditionary to Europe in June 1818 – he became its main protagonist.¹ Between 1817 and 1835, Natterer knew how to overcome with determination and willpower the countless difficulties he had encountered over these 18 years – he was undoubtedly impressive.

In chronological terms, the naturalist went through the period encompassing D. Pedro and Leopoldina's wedding; the so-called Liberal Revolution and the Portuguese demands to their king: D. João VI's return to Portugal and Brazil's Independence proclamation. He also underwent the early years of the First Kingship in Brazil; D. João's death and the struggle for his succession; Leopoldina's death; D. Pedro I's abdication and departure to Portugal; the Brazilian regency period, and finally the *Cabanagem* revolution – a pro-separatist movement that occurred in the then-state of Grão-Pará, Empire of Brazil. The incident personally affected Natterer as a traveler. For this reason as well, Natterer's letters and notes not only are important records for the history of science, but for the Brazilian general history.

Mostly everything we know about Natterer's life was imparted to us by his own writings. They are all a collection of letters and outlines, notes and journal fragments that have come to us thanks to the ingenious work of Austrian researchers Kurt Schmutzler, Michaela Höldrich and Robert Steile. In the foundations of a research project sponsored in 2002 by then Museum of Ethnology [*Museum für Völkerkunde*], renamed as *Weltmuseum Wien*, these researchers collected and transcribed letters testimonies, (what a hard work!) and Natterer's news scattered in the collections of the Imperial Archive [*Haus-Hof- und Staatsarchiv*], available in the Manuscripts Section of the Vienna City and State Library – also in the *Weltmuseum Wien* itself. The job was done with the intent to support the work and scientific description of Johann Natterer's ethnographic collection existent in the museum's archives.

In the Imperial Archives the original letters sent by Natterer to the Austrian ambassadors and business officials in Rio de Janeiro can be found. They were intended to the State Chancellery in Vienna. In addition, it is possible to find there the Service Instructions mentioned before, as well as accounts about the expedition sent by Austrian officials in Rio and documents about the preparation of the expedition.

From the Manuscript Section of the Vienna City and State Library is the source of all Johann Natterer's 32 letters from 1817 to 1835, also two of them are from 1836, and copies of letters from 1817 to 1839. Most of them are notes to his brother, Joseph Natterer, then curator (responsible for the costs) at the Natural Objects Office. There is also some correspondence from Johann Natterer upon his return from Brazil.

¹ From the initial group of scientists remained in Brazil from then on only Natterer and his hunting assistant, Dominik Sochor.

Nevertheless, the most interesting documentation undoubtedly consists of a convolute of copies and drafts of 162 Natterer's letters, written between 1817 and 1836 available today in the *Weltmuseum Wien*. By then it was a common practice the maintenance of these copies and drafts with the intention of having them submitted to the responsible authorities in the event of loss and misplacement of the original accounts and letters, usually sent along with the consignments, which had to endure long-distance journeys.

There are about 200 letters in total sent by Natterer between 1817 and 1835 and preserved in these collections. In quantitative terms, they are more numerous at certain point of their travels, in other words, they are not evenly distributed throughout the 18 years that Natterer was in Brazil. Letters from the time when the naturalist traveled through the Amazon are proportionally far less frequent than those from the previous period. However, as a whole, these letters record in detail almost every step of his journey in Brazil.

This batch does not cover all of Natterer's writings in Brazil. In his excellent Natterer's biography – the most complete to this date – Kurt Schmutzler describes some relevant losses. At the beginning of the expedition in March 1818, notes from Natterer and other diplomatic dispatches were thrown overboard when Spanish-flagged pirates boarded an English ship carrying them to Vienna. Those responsible for the dispatches chose to sacrifice the Austrian expeditioners' shipment and reports, rather than let them fall into the hands of the Spanish. Schmutzler also mentions the sinking episode of another ship in 1820 and the disturbances in Pará in 1835, as in other occasions when other writings by Natterer were presumably lost. However, the greatest loss happened in October 1848, amidst the revolutionary events that swept Vienna, when the Hofburg was hit by bombings carried out by the government forces themselves, which at the time suppressed the protests. A great amount of the Natural Objects Office collection existent therein – including all correspondence by Karl von Schreibers, responsible for organizing the Brazilian expedition – caught fire in the episode. All of Natterer's original letters to Schreiber were lost in the incident.²

Because of that and other reasons, the documentation transcribed by Schmutzler, Höldrich, and Steinle is essential for the reconstruction of the Austrian scientific expedition in Brazil as a whole, and especially for Natterer's life path.

Dr. Christian Feest, then director of the Vienna Museum of Ethnology shared this documentation to me personally, by the time of my postdoctoral studies in Vienna between 2009 and 2010. Based on it, and guided by Schmutzler's biography, I reproduce here some fragments of this documentation, which I translated. With them, I composed a "quasi-narrative" that highlights some aspects of Natterer's history by the time immediately preceding and after the expedition's course (1817-1835). It is a "quasi-narrative" due to the number of available documents and the limited space. I created with these fragments an extremely lacunar and intersected narrative sequence, with chronological leaps. In this composition, I tried to reduce to a minimum my own comments and clarifications in order to let Natterer himself "speak".

Since drafts were used for the project foundation, several passages are syntactically truncated in the original text, which I tried to soften inserting information in square brackets. Despite those limitations, the publication of these fragments offers us a more "vivid" and "tasty" approach to the daily routine of this fascinating character.

² SCHMUTZER, Kurt. *Der Liebe zur Naturgeschichte halber. Johann Natterers Reise in Brasilien 1817-1936*. Wien: Verlag der Österreichischen Akademie der Wissenschaften, 2011, p. 277-278.

Mr. Hocheder
Museum Blinde Schule

Toucher l'ouïe j'ai une bille t'que vous m'avez
envoyé. Voilà le général opéra où je vous prie
de lui exprimer mes compliments. La compagnie
qui a acheté cette bille y mettra j'espère une belle
étiquette au nom de monsieur que j'aurai à vous démon-
trer.

Yours

437/7-7

Johann Natterer's notes.
NHMW

Species inventory annotation
of rock crystals collected by
J. C. Hocheder, with a *crocoite* crystal
collected in Goyabeiras, near
Congonhas do Campo, Minas Gerais.
NHMW

2. A naturalist and his mission

Let us take as a starting point a letter from Natterer sent by the end of 1812 to an unknown authority, presumably Archduke Johann (Francis I's brother). In this letter, the young naturalist appeals for an appointment as a scientist and, with this purpose, exposes in detail the experience he had accumulated in previous years, narrating about himself in the third person.

"Encouraged by the example of his father, an acquaintance of Your Imperial Highness. As inspector of the I[mperial] D[epartment] of Nat[ural Objects], the sign[er] had already obtained in the early days of his youth a passionate disposition for natural history, dedicating almost exclusively to it. Therefore, he learned almost all the auxiliary knowledge that a naturalist must possess when, as such has to travel and collect with some profit. Thus, the sign[er] has dedicated himself to zoology with diligence, exerting in it particularly the fields of mammal[ogy], orn[ithology], ichthyol[ogy], herpeto[logy], ent[omology] and helminthology, and seeking to perfect at them. He acquired also some knowledge in mineralogy and botany. He acquired knowledge using the Cabinet Library, as well as the Court Library, being suitable to him the knowledge of French, English, Italian, as well as Latin. Under his father's direction, having practiced for many years, he acquired the art of taxidermy - depicting animals after their death in a lasting and faithful manner to the original - in a way that he boasts of being able to exercise it equally well on mammals, birds, amphibians and fish, both in fresh specimens and in dried skin. The indispensable knowledge to do so – such as drawing, painting, working on wax and wood – he possesses it in satisfactory level. Likewise, he has no less experience in different ways of catching larger animals, insects, and shooting. He has particular training in subject as difficult as unsanitary such as collecting intestinal worms. He has also cooperated considerably in the formation and enrichment of the I[mperial] Collection of intestinal worms."³

Natterer then starts to itemize in the same letter, the various trips for collection he made with his father and those all by himself. Then he highlights his active participation in May 1809 in the transfer of part of the Natural Objects Office to Temesvar (currently the Czech Republic) due to the Napoleonic threat, in addition to other activities that had similarly given him great experience as a naturalist.

³ Johann Natterer to unknown
[presumably Archduke Johann], s.l., n.d.
[approximately late 1812].

However, Natterer is aware that his job in the Cabinet would be very difficult. Because of that, he proceeds on the note:

“a situation that threatens to change the fulfillment of his wishes to an extremely distant future, and this circumstance is, that three people of the same family could not be simultaneously employed in the same position; inasmuch as the signer’s father is an inspector there, and his brother a curator [Costs]. (...) That is why the signatory requests his most clement I[mperial] Highness to regard him whenever there is a replacement vacancy for the curator position or opportunity for a new one at Johanneum.”⁴

Notwithstanding a certain mood of resignation, for not being able to occupy as he desired, the position in the Natural Objects Office, Natterer’s letter conveys great self-confidence and ambition.

In 1816, when the great opportunity that he expected so much appeared – the trip to Brazil – the naturalist expressed the same self-confidence and ambition. In the incident in which the emperor appointed Johann Christian Mikan (1769-1844) – professor of general natural history at the University of Prague – as the expedition’s chief, Natterer reacts with vehemence and dismay to the nomination by writing directly to the emperor.

“If this change in the initial plan, which the cause I can also take as either a sudden distrust of my knowledge or of my honesty, and if the circumstance that a teacher who is foreign to me, and which he has none or almost no merit related to Your Majesty’s Natural History Office. Your Majesty may criticize and disapprove my experiences acquired in many trips, and may determine or modify my travel plans. Your Majesty may even prescribe or evaluate my work, and do so, after director Schreibers himself has expressed and witnessed about this knowledge that I possess, and having recommended me after I have led all my countless natural history journeys in which I had my own subordinates. If this change hurts me so much now and I cannot accept it with indifference, I hope Your Majesty will forgive me, since it imposed on me both a punishment as well as a shame. (...) May Your Majesty see what I have accomplished on my own; may no one be able to diminish the honor I intend to reap from this trip, nor take advantage of my merits.”⁵

An intermediate solution was found. Perhaps the relationship between Mikan and Natterer had been definitely marked by the competition for the expedition control. Nevertheless, a year and a half later, the moment Mikan was leaving Brazil and returning to Europe, Natterer wrote to Schreibers in a conciliatory manner: “(Mr.) Professor Mikan said goodbye to me as a friend, I would almost say so, because I never gave him reason to complain. Everything he caused me in Vienna directly or indirectly I had covered with a thick veil. This occurred taking in consideration our unity.”⁶

⁴ Idem.

⁵ Johann Natterer to Francis I, Vienna, December 27, 1816. Imperial Archives of Vienna.

⁶ Johann Natterer to Karl von Schreibers, Rio de Janeiro, June 3, 1818. Collection of Manuscripts of the Austrian National Library.

3. Arrival in Brazil

The journey to Brazil had numerous dramatic moments. Right in the early voyage hours of the frigates *Austria* and *Augusta* – departing from the Port of Trieste towards Brazil, in April 1817 – a storm that loomed had finally and mercilessly broken out.

“The slamming of a side door that had opened awoke me. I checked my watch and it was two o’clock. Notwithstanding, I fell asleep again, despite the severe movement of the ship. Then I was again awakened by the fall of my water bowl and my tureen. It was 6 o’clock. I got up and got dressed. The water then hit up to the helm and got into my cabin. One could stand on his feet with effort. Passengers were already seated on deck [Quarrée] with seasickness. I requested that the water should be removed of my cabin and lay down again, as the ship shook harder. The storm had now gotten even more violent, the noise of things from the ship breaking and rolling became horrible, all bottles, glass, table, and chair fell over each other with a frightening crash. Water seeped into the ship from all sides, also through my window, in a way that it ran in and out by the door. The chaplain stood with the a crucifix, clung to a deck bar and gave the blessing. Everyone was livid as corpses.”

The following morning Natterer observed the traces of devastation, and he described the chaos aboard as follows:

“When I climbed the deck it was possible to see the wretched state it was in. Everything was destroyed, things were piled on top of the other, broken masts, canopy, rigging, cannonballs, chicken crates, hammocks, candles, mastheads. The front and rear masts were still there where they were mounted. The destruction was unprecedented. They started to sort out things. The rigging was distributed and carried down to the batteries. There the situation seemed pitiful as well. Barrels, sheep, chickens, oxen, pigs, calves – everything was sloppy and mixed. An ox was agonizing”⁷.

The *Augusta*, Natterer’s vessel, was seriously damaged. After weeks of fixing the frigate still had to spend time in Gibraltar, waiting on archduchess Leopoldina and her entourage. In September of 1817 the departure finally happened from there toward Rio. Natterer describes the trip of more than two month to his brother as an extremely unhealthy and unpleasant adventure.

Rarely was the time we could open the hatch lock, which being a foot wide and half a foot tall helped to renew the air, but only let very little light in the cabin. Nevertheless, their window locks would close so badly most of them, especially mine, that on every swing or sway of the ship it threw the window under water, it permeated into the pitchers in the little cabin, so that in the end I had to use a bucket where the water ran down a tin drain. I lined the floor with planks so I did not have to walk always on water. (...) If I wanted to work on something, it had to be candlelit in that pit, because even at the table on the deck it was usually dark, since at the top of the deck stretched against the sun a siding formed by the sails. The ship’s strong and almost permanent sway, the crackling and squeaky sound produced by the raging high seas made it impossible for me to work longer tasks.⁸

THOMAS ENDER
The *Augusta* frigate during a storm.
Scene captured by Ender from the
Austria frigate.
Water colored pencil. 192x258mm.
K. ACAD

⁷ Johann Natterer, Report on the Istrian Storm, Version A, April / May 1817. Weltmuseum Wien Archive.

⁸ Johann Natterer to Joseph Natterer, Cabo Frio Waters, aboard *Augusta*, November 4, 1817. Vienna City and State Library.



Rio's arrival was a relief:

"Finally today we were delighted to see before us, at the early light of dawn the long-dreamed Cabo Frio to the northwest. (...) The so-close release from our lengthy prison onboard filled us with joy, even more because of the consistent stormy weather of the last days, which completely ruined our stay in the frigate. It was unpleasant in every thinkable way. (...) Now we are in Brazil. (...) Rio's entryway presents awful mountain forms, especially the range on the western side. Outside of it we had passed by palm tree-covered islands before. Perceiving beforehand the deeply great wealth that awaited us, I was always on deck with my handheld telescope, immersed in the visions of those boundless mountain ranges."⁹

In Rio, the naturalist had to face an entirely new reality:

"During the day in the city one can almost see no one, but Negroes, mostly half-naked which gives us a strange impression. In the same message tells about Spix and Martius: I saw the Bavarians. In about 12 days, they will go through Sao Paulo to Vila Rica, where they want to stay for 3 months. Spix said he has already captured 100 birds. These [two] have already lost all their enthusiasm because of the excursions and trips' difficulties, and especially the heat. Spix, in particular, is already looking forward to returning to Europe, and explained to me that he would have never come here if he had known all of this in advance."¹⁰

⁹ Johann Natterer to Joseph Natterer, Rio de Janeiro, November 7-8, 1817. Vienna City and State Library.

¹⁰ Idem.

K. AKAD.

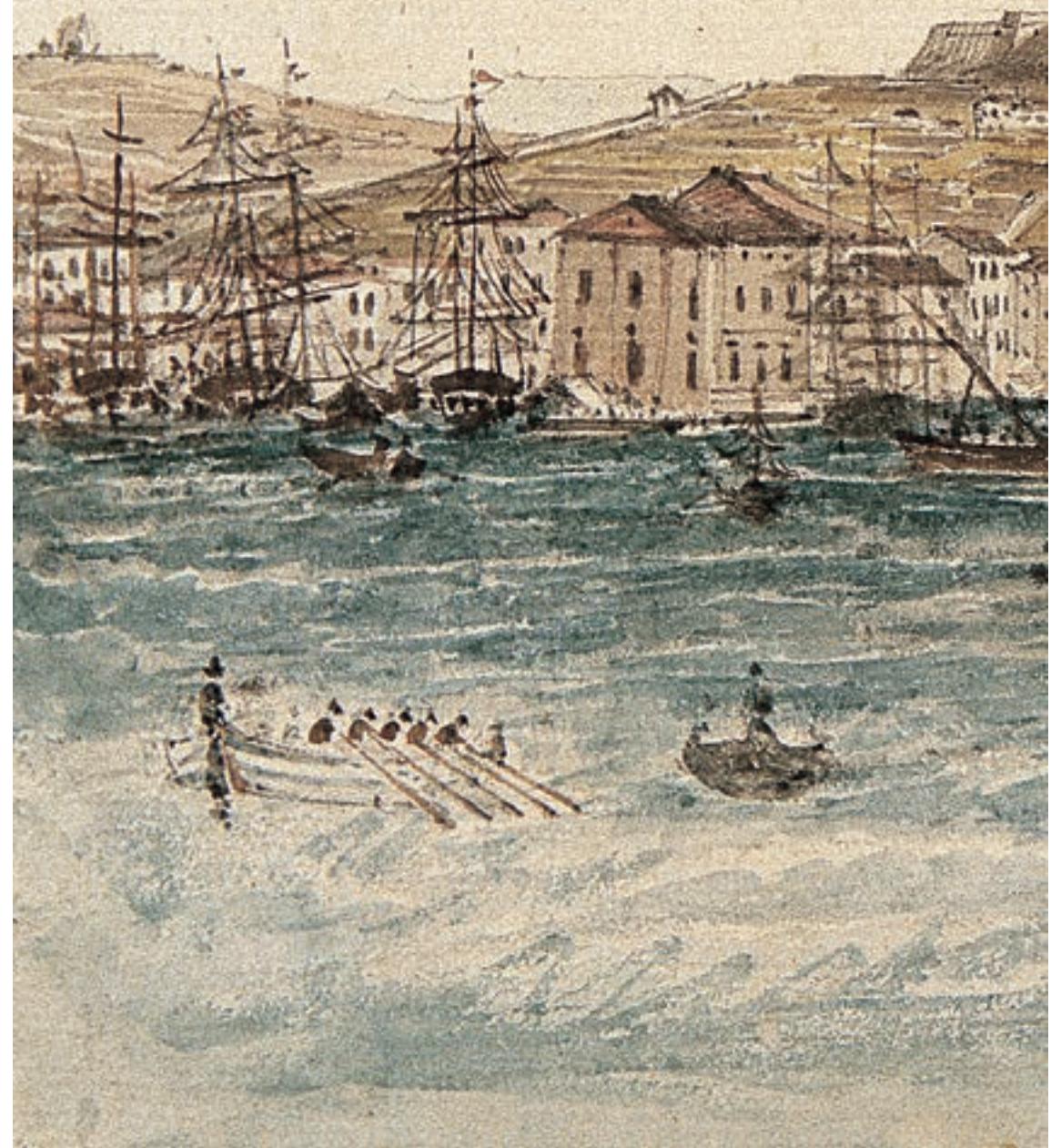
THOMAS ENDER

Port of Trieste, aboard the imperial and real
frigate the *Austria*.

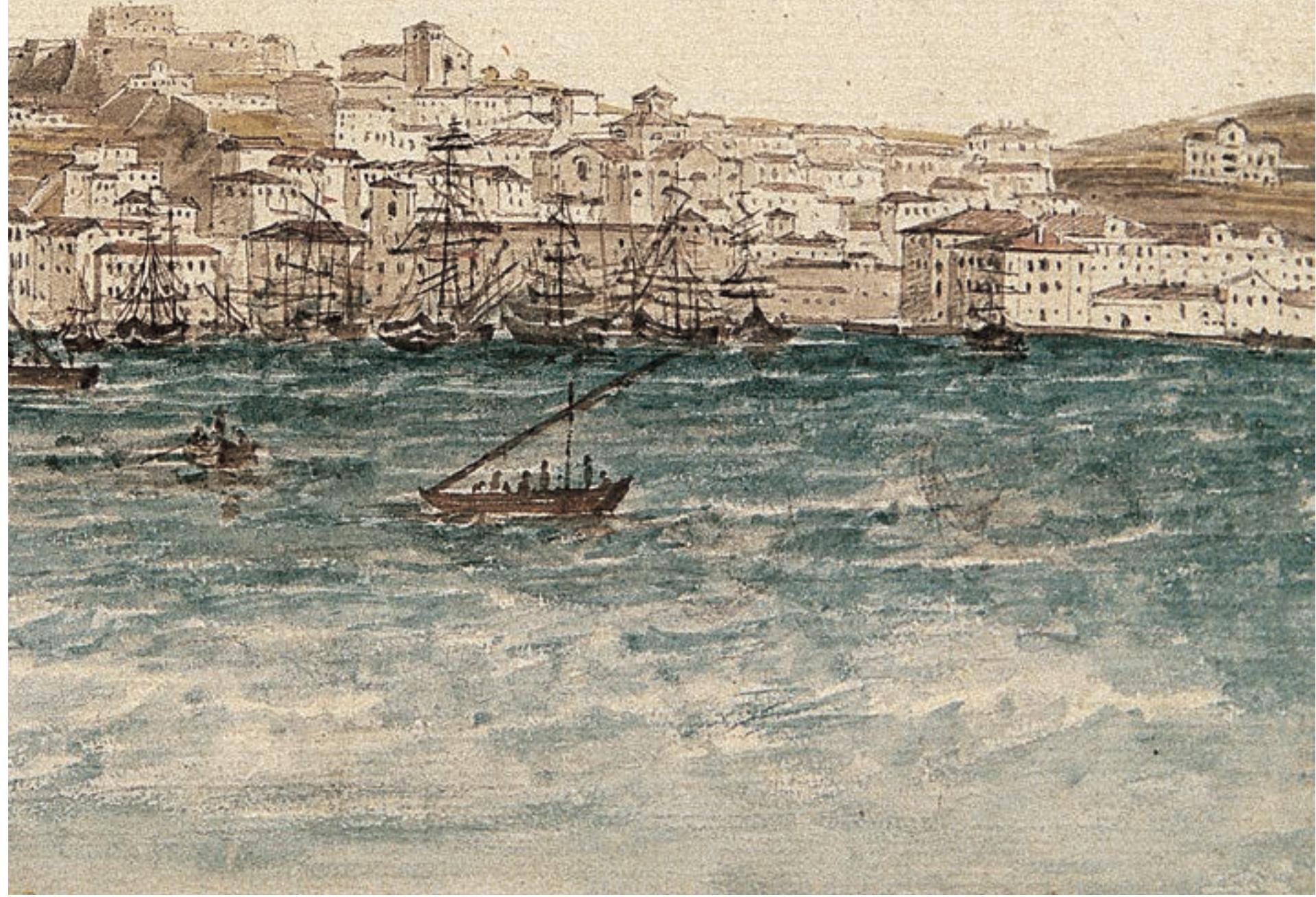
Watercolor, 200x264mm.

A watercolor was painted on April 7, 1817
aboard Austria. At the beginning of the trip,
Thomas Ender's early sketches have yet
something shy and careless, and the colors are
in mostly darker. This, however, should
change soon. Later, in Gibraltar,
Ender would find his new style.

K. ACAD



Principal port, auf der Levante, d. t. Levant.





Ein Theil von Rio de Janeiro mit der Wasserleitung, und Aufzic



JOHANN EMANUEL POHL

A part of Rio de Janeiro, with the aqueduct
and view of the bay. Copper engraving by
Axmann, according to Thomas Ender, n.d.
NHMW

blick gegen die Bay.



Helicteres brasiliensis.

JOHANN CHRISTIAN MIKAN
Joseph August Satory, *Helicteres brasiliensis*, hand-colored lithograph,
printed by the Lithographic Institute of Vienna, 1820. The plant was
collected in Rio de Janeiro.
One specimen was planted in the
gardens of the Schönbrunn palace and
another in Prague University garden.
NHMW

JOHANN CHRISTIAN MIKAN
Michael Sandler, *Tanagra chalybea*,
Hand-colored lithograph, printed by
the Lithographic Institute of Vienna,
1820. The bird was slaughtered by
Natterer in Ipanema.
NHMW



Tanagra chalybea
1. mas 2. femina



Tanagra diademata.

JOHANN CHRISTIAN MIKAN
Michael Sandler, *Tanagra diademata*,
hand-colored lithograph, printed by the
Lithographic Institute of Vienna, 1820.
The bird was slaughtered by Natterer
NHMW

JOHANN CHRISTIAN MIKAN
JFerdinand Lukas Bauer, *Vellozia candida*,
hand-colored lithograph, 1820. The plant
was collected in Sebastianópolis, on the way
to Corcovado, and was designed by Bauer
according to the dry and pressed specimen.
Mikan said, enthusiastically, that the
illustration owes nothing to a living plant.
NHMW



Vellozia candida.

4. Daily routine and actual difficulties

The most conspicuous complications Natterer faced in his everyday life in Brazil were financial, logistical, and health related.

In financial terms, the expedition has faced difficulties since the arrival of the naturalists and their team. The initial enthusiasm soon gave way to discouragement and disagreement. According to Natterer, Ambassador von Eltz only made faltering decisions, especially when it came to expenses.

“We have just had to present both traveling and hosting budgets in order to calculate the annual amount. All of this Count Elz [sic] will send to Vienna, for he dared not doing anything and the money is almost over. He does not care about the wages; he cares about absolutely nothing. He says he has not received any commission. This brings us bad expectations. About this, he awaits orders from Vienna. (...) If Sochor does not receive the wages, which almost seems to be the case, he will return with the frigates to leave in March. I cannot stop him, although I may need him badly now for dissection. He wants to save something for his children. Probably all budgets will go to the director. He could commit himself to his best efforts on the topic of the wages. There are too many people on the expedition. That is why the cost is so high, and that makes me suppose that some of them or maybe all will be called back home soon.”¹¹

There were countless financial difficulties for Natterer during his stay in Brazil. The Service Instruction initially predicted that advance payments and expeditionary expenses would be paid from the embassy endowment. However, this fact later was proved impractical as Natterer moved away from Rio de Janeiro. Money sent directly to him or to intermediaries became necessary. But, this was not always possible, as sometimes there was no money available in specie, as a letter from Cuiabá attests.

“I will probably be able to perform my departure from Matto Grosso next year, since I will have to spend the coming rainy season here. Nevertheless, the thought of these detours, probably a longer-term stay, makes me a little uncomfortable inasmuch as the money I still have would not be enough until my arrival in Pará, especially if I need to finance the expenses of the vehicles to be equipped and the people's provision needed for the Amazon's crossing, besides more provision for their return. For that reason, I wrote last year from Goiaz to Mr. von Schreibers, so that he would have the kindness to commit himself so that I would receive money here in Cuyaba through the kind intercession of [Y]our E[xcellence]. There are difficulties in receiving money here. From the Royal Treasury is not possible, it has no money only debts; and they never sent money to Rio; on the contrary, they have used annually some golden arrobas ^{TN}. This has stopped. Traders do not want any trade with Rio because they convert their money into diamonds, gold dust, and gold bar to make a profit in Rio. Perhaps the only way would be - for the sake of safety - transferring the money to one of the traders who goes to Rio every year and, for this purpose, pay the remittance”.¹²

JOHANN CHRISTIAN MIKAN
Caecilia annulata, lithography, 1820.
NHMW

¹¹ Johann Natterer to Joseph Natterer, Rio de Janeiro, December 5, 1817. Vienna City and State Library.

^{TN} Translator's Note: a Portuguese weight unit which was equal to 14.7kg (32 pounds).

¹² Johann Natterer to Wenzel Philipp Leopold von Mareschal, Cuiaba, February 14, 1824, Imperial Archives in Vienna.



¹³ Johann Natterer a Franz Scheiner, Cuiaba, February 15, 1824. *Weltmuseum Wien* Archive.

¹⁴ Johann Natterer to Joseph Natterer, Ipanema, July 8/14, 1820. Vienna City and State Library.

¹⁵ Johann Natterer to Wenzel Philipp Leopold von Mareschal, Cuiaba, February 14, 1824. Vienna Imperial Archive.

^{TN} Translator's Note: A cassimba (A Brazilian, Angolan term) is a well or hole dug to obtain water

¹⁶ Johann Natterer to Wenzel Philipp Leopold von Mareschal, Cuiaba, January 8, 1828. Imperial Archives of Vienna.

¹⁷ Journal fragment, December 3-7, 1820. Vienna City and State Library.

This solution was finally put to work, but payments only arrived about six months later.¹³ In the Amazon region, Natterer depended on the help of the British by means of loans or intercessions with English diplomatic representations.

Some of the most serious logistical difficulties was related to the provisions, the caravan's displacement and accommodation, and preparation and dispatch of the collected objects to Vienna.

Expeditionary provisions often depended on food trade or local availability. Natterer found himself permanently forced to adapt to diets that were not of his liking. "Now, after more than a year, I eat beans every day and I feel disgust. Of course sometimes I eat them with some chicken or meat, so it may have a better taste to me (...)."¹⁴

On the trip from Goiás (capital of the province of the same name) to Cuiabá, the naturalist and his crew went through a serious food situation, since the region of the Mato Grosso plateau between the Araguaia river and Cuiabá was a sparsely populated grassland, in which aside from hunting there was no food. To make matters worse, in more than one episode the mules overturned their loads, causing them to lose much of their supply. In one of these incidents there was even more damage when "4 loaded animals rushed into the torrential river, because a rickety bridge or "pinguela" made of some overlapping trees was terrible conditions. With much effort animals and cargo were saved, although everything was soggy and there was much wreckage".¹⁵

Years later in September 1827, on the trip from Vila Bela de Santíssima Trindade to Cuiabá, Natterer describes to Mareschal the serious situation of water shortage at the end of the dry season: "Drinking water was taken from a *cassimba*^{TN} [sic], a deep hole in the ground near the lagoon. (...) Some holes were drilled in order to provide drinking water in the shore land. The water was naturally very hot, and my dogs immediately made it cloudy. Even the mules got sick because that was the only water which could be found in that place and it was extremely bad".¹⁶

In addition to the provision's logistics, Natterer and his expedition faced heavy hardships on the way due to route and road conditions. Still in 1820, when the caravan was moving from Curitiba to Paranaguá (both towns are in the state of Paraná) crossing the coastal mountains, Natterer recorded in his diary a dramatic description of the dangerous paths in the mountains.

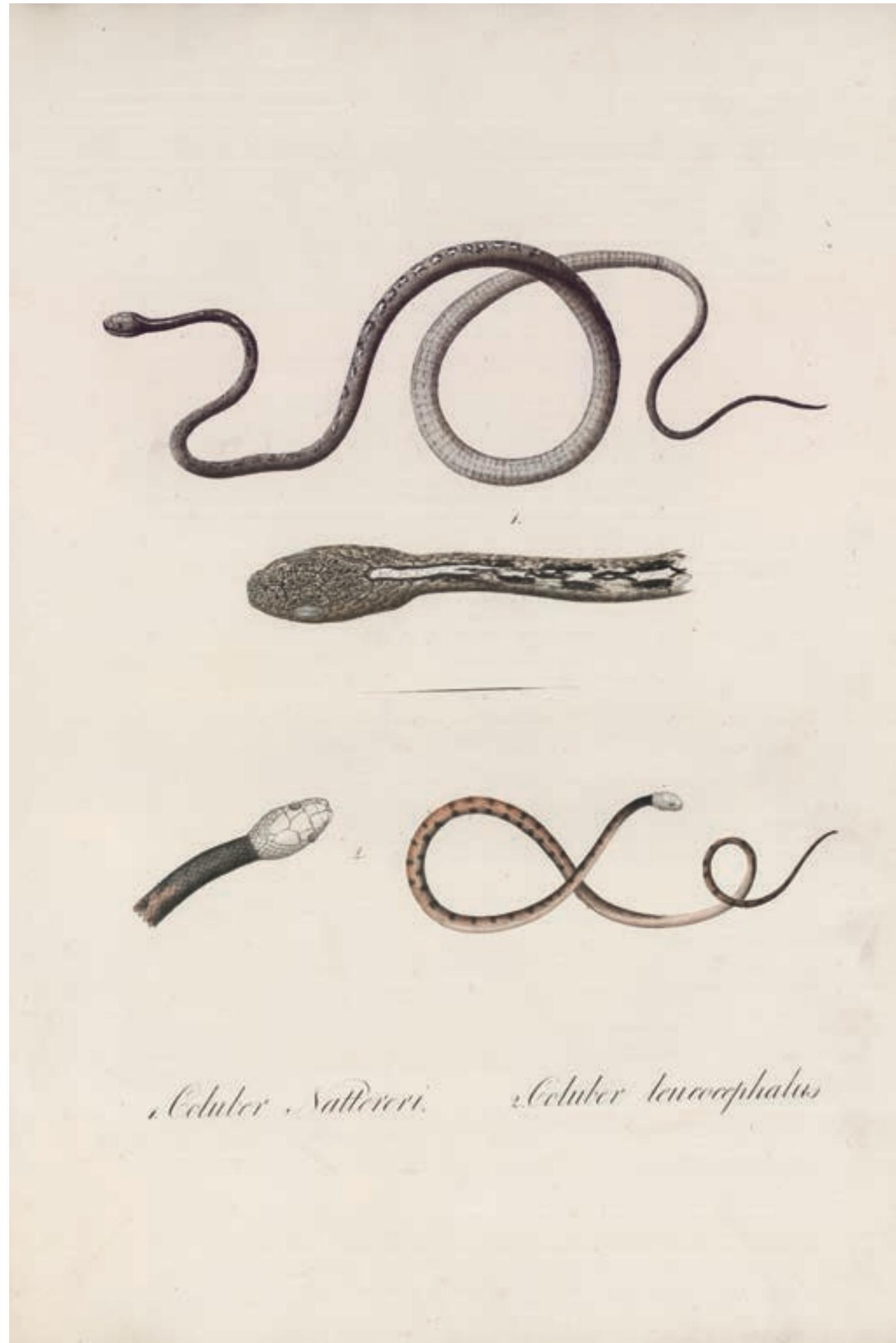
"It is almost hard to understand how loaded animals can make through this path without breaking their necks. I had long since dismounted the mules, because the danger of falling over the animals' heads into the precipice, quite often almost vertical; or of being crushed by the rocks in the narrow canyons - even though one kept his feet always raised - was too great. And even on foot the path was so hard that I had to sustain myself with my hands on both sides so as not to slip between the rocks and break foot and arm. (...) It is impossible to have any idea how bad this pathway is without seeing it with your own eyes. And, according to the guide, the way was good when I crossed it, because it had been awhile since the last rainy day, because whenever it happened, they often spent eight days in the mountains and mules were lost, because they broke their necks and leg, as many skeletons found there can prove. Or because they drowned in the swamp when they fall in there with their loads and can no longer get back to surface, or they are not assisted in time by people."¹⁷



Corvus tricolor Natterer

JOHANN CHRISTIAN MIKAN
Michael Sandler, based on Leopold von
Stoll's model, *Corvus tricolor*, Natterer,
hand-colored lithograph, printed by the
Vienna Lithographic Institute, 1820.
The bird was slaughtered by Natterer in
Ipanema, Rio Verde.
NHMW

JOHANN CHRISTIAN MIKAN
1. *Coluber nattereri*
2. *Coluber leucocephalus*,
hand-colored lithograph, 1820.
Mikan dedicated the snake, collected
in Sebastianópolis, to Johann Natterer.
NHMW



The cargo transportation challenge was enormous. When Natterer did his first “big trip” from Ipanema (to where he returned) to Cuiabá, he left with 147 mules, 4 horses, also two mares, and a foal. There is little information about the equipment in his notes, but it is known that these innumerable mules carried hundreds of vials and bottles, as well as provisions, apparatus and weapons. They also carried some utensils that he himself had made since they were unavailable, such as “an entire device for worms’ investigation, containing 24 little bottles, small tin bowls, tin slabs, small flasks, and its unique instruments.”¹⁸

In October of 1822, when the crew started to move, the mules got nervous and chaos broke out:

“some semi-meek animals, that knocked over their cargo and transport saddles, frightened others which did the same. Consequently, the fright spread throughout the troops, so that everything burst open. Three bizarre dogs that approached and chased the animals generalized the disorder. (...) On the metalworking hill, everything was full of overturned things. There was nothing left for us, but to gather up what was still loaded and to head toward the front of the factory gate; where I told them to unload in clear skies. This happened just a quarter of a mile from Ipanema.”¹⁹

More than two weeks had passed until the team could depart and recaptured the scattered mules, lost in panic. Part of the cargo was lost in the commotion. To add insult to injury, Natterer reports in his journal, “[the] rain did not take long time to come and remained lengthy and strong. Although I was covered with some skins, I was soaked with water. I was glad when the day came, and the rain had subsided.”²⁰ Only later when the troops had fully recovered and the damaged saddles, reins, and harness had been repaired could Natterer leave the camp. (In this same fragment, Natterer reports other episodes of mules’ escapes and deaths, and several other days lost.)

After going through Vila de São Carlos (Campinas), the caravan stopped in a small rural property at Irisanga (north of Moji-Mirim). “There are 2 wretched houses, though well-covered with tiles. Right in front of them, there was a large ranch with a shop”.²¹ Staying in these ranches was not uncommon at all for the absolute lack of houses or even huts. In them, neither the people nor the luggage were safe from the storms.

“The place was bad because the two houses were inhabited and could not shelter my possessions. Then I had to settle with a large, well-covered ranch (a barn, built for travelers at different campsite places), which I lived from November 29th until March 20th. The cloudbursts were very constant. There were weeks when it rained every day. (...) The rainwater came from the hill in torrents, and it pulled out a restraint that deflected the torrent, running across the ranch more than a foot high. Everything that was on the ground and was not fixed in time was swept away by the flood; or got heavily drenched.”²²

JOHANN BAPTIST NATTERER
Side view of a golden dorado,
Salminus brasiliensis
(Characiformes, Characidae), in
proportion to an Austrian inch scale
sketched by the artist.
Golden dorado, n° 9
Hydrocyon brevidens Cuvier
NHMW

¹⁸ Johann Natterer to Joseph Natterer, Ipanema, September 30, 1822. Vienna City and State Library.

¹⁹ Johann Natterer to Joseph Natterer, Leap, 26 October 1822. Vienna City and State Library.

²⁰ Journal fragment, October 5 to October 30, 1822. *Weltmuseum Wien* Archive.

²¹ Journal fragment, March 26-April 9, 1823. *Weltmuseum Wien* Archive.

²² Johann Natterer to Joseph Natterer, Goiás, August 29, 1823. Vienna City and State Library.



Most of the time the traveler came across “accommodations” as one that could be used as an example, where “[there was] nothing in the room, but a large cattle bar. There was no table anywhere to be found, but they arranged two seats for me to work on, with which we had to bring about with them”.²³

In July 1827, Natterer was summoned to return as soon as possible to Vienna, issued six months earlier by the emperor. However, that was by then basically impossible, because the traveler would have to repurchase many mules at a very high price.

“From the writing of Y(our) Majesty and Y(our) Highness I have concluded that it is Y(our) Majesty’s will that I extend my stay in Brazil only as strictly as necessary and that, therefore, I strive to make as soon as possible the initial arrangements for my departure from here to the province of Pará. As Pará and Rio de Janeiro are approximately the same distance from Mato Grosso, and as I had long been preparing to return going through Pará, thinking in advance about it I reduced my mules so much that their numbers would barely make it to transport the third part of my headcount and collections to Rio.”²⁴

²³ Natterer’s letter from SCHREIBERS, *Nachrichten von den kaiserlich-österreichischen Naturforscher in Brasilien und den Resultaten ihrer Betriebsamkeit*, Bd. 2, 1822, p. 21.

²⁴ Johann Natterer to Wenzel Philipp Leopold von Mareschal, Beautiful Trinity Villa, July 20, 1827. Vienna Imperial Archive.



Lanius undulatus.

JOHANN CHRISTIAN MIKAN
Lanus undulatus, hand-colored lithograph,
1820. Mikan shot down the bird at
Langsdorff's property, at the Cassava Farm.
NHMW

JOHANN CHRISTIAN MIKAN
Michael Sandler, according to Leopold
von Stoll's model, *Passiflora amethystina*,
hand-colored lithograph, printed by the
Lithographic Institute of Vienna, 1820.



River transport brought to the expedition other types of difficulties. Natterer recounts some of these difficulties on his trip from Borba to Manaus in August 1830.

The logistical problems related to the collections remittances to Vienna increased as much as the naturalist traveler headed toward regions increasingly remote of Brazil. When connections with Europe began to settle on Amazonian routes, shipments were made by boat along the Amazon to Belem, where contacts, mostly British, helped Natterer decisively by offering shipping routes through London.

Nevertheless, none of these difficulties can be compared with the serious health problems that the naturalist faced. In Cuiabá, in early 1824, Natterer wrote to an Austrian merchant in Rio: "I am not doing very well here. I got Hepatitis that caused me [sic] suffering for several months, and which so far I have not completely healed."²⁵ His situation was so severe that only months later he was able to report his sickness to his own brother.

"I had felt it for a while, whenever I sat down with my body bent forward, a suppressed pain in my liver when I wrote or did other tasks. I did not pay attention. However, the pain was increasing little by little, and it resulted in inflammation. A surgeon here – a friend of mine, who treats me – has made me feel relatively well by using heavy bleedings and patches and telling me to totally avoid that stooped position. But I have restarted my work, though most of it is done standing up, particularly the laborious occupation of ordering, replacement, composition, and selection of the very valuable intestinal worms collection to be sent, has now worsened my condition again, so that by what it seems, this caused hardening of the liver."²⁶

Even the letters begun in December 1824 remained incomplete. Only in February 1825, did he continue the correspondence and describe to his brother the following development of his sufferings:

"Only by lying in bed I could feel relief. That's why I stayed in bed longer than outside for a while, but since I could feel no improvement, the local senior surgeon, my friend, found it necessary to pass me a seton or horse mane, which has been haunting me for two months. It is in the upper part of my belly. But, thank heavens I'm on my way to improvement and I will gladly bear my cross and fully restore myself. (...)Therefore, our father need not be afraid, for only the good die young, and proverbs are true."²⁷

This painful treatment with horse mane (*setaceum*) consisted in causing artificial inflammation by piercing a folded skin through which a cord was inserted. This mane caused a suppuration from which it was expected to remove the primary cluster of a disease from the body.

This letter shows that Natterer was not even aware of his father's death in 1823.

²⁵ Johann Natterer to Franz Scheiner, Cuiaba, December 8, 1824. *Weltmuseum Wien* Archive.

²⁶ Johann Natterer to Joseph Natterer, Cuiaba, December 16, 1824. Vienna City and State Library.

²⁷ Johann Natterer to Joseph Natterer, Cuiaba, February 18, 1825. Vienna City and State Library.

JOHANN BAPTIST EMANUEL POHL
Michael Sandler, *Linociera glomerata*.
In: *Plantarum Brasiliæ icones et
descriptiones hactenus ineditæ*, volume 2.
Hand-colored lithograph, Vienna, 1831.
NHMW



The naturalist's description of the Cáceres region (Mato Grosso state) in June 1826 gives evidence that his disease would accompany him for years later. (In fact, the scientist suffered of it from then until the end of his life.)

"Although I arrived here last October, due to my ill health conditions, I could not dare expose myself to the unhealthy climate of the most unsanitary season of all – the rainy season – as they all advised against it, and as it turned out. The diseases were much more frequent and deleterious to the natives themselves, or to those who had long lived there. Among the newcomers, none escaped from at least one long fever. Many of them (...) unfortunately had to pay Death's tribute to this province, which since its first discovery devours human lives."²⁸

²⁸ Johann Natterer to Wenzel Philipp Leopold Baron von Mareschal, Caiçara, June 16, 1826. Imperial Archives of Vienna.

5. Encounters with “native people”

The central aspect of Natterer's writings is his descriptions of the commonest inhabitants of Brazil. When he refers in his writings to local populations, particularly Negroes (slaves) and indigenous people, only a few times predominates the objective mood which we saw earlier in the description of his lodgings in Sepetiba.

Natterer was himself a slave owner. In a letter from Cuiaba to his brother, in 1825, amid the long description of the goods and their respective prices, the traveler mentions his recent “acquisitions”.

Between 1825 and 1826, at the Caiçara Farm (near Cáceres, Mato Grosso), Natterer once again had contact with indigenous people, who in his notes he classifies into two categories – the “meek” and the “savage”. In his notebook he writes that the “Bororo from Campanha” (who were already made sedentary, “meek”) and “Bororo Cabaçal (free-living reckless) “they do not understand each other, although they have formed one nation in the past and have separated by hostility”.²⁹

The “meek” are those who, under violence, have been “pacified”. With the renounce of the nomadic way of life, they now corresponded to the way of life of Brazilians and Europeans. In the immediate vicinity of Cáceres, the bororos

“they were finally forced to have peace, and in a very simple and effective way, namely in one of their last raids against them. Just a few years ago they captured one of their chiefs along with a handful of men. The Villa Maria district commander kept them for a while close to him, treated them well, and gave them gifts. But he ordered to translate to the chief that he would give him and his companions freedom if he promised to convince the tribe of peace. He did so, and returned for Jauru. After a while he brought with him some men whom the commander also served well and presented. Finally, they became acquainted and brought their wives.”³⁰

The “tame” bororos were settled in the villages' vicinity or farms. “Some are already among the cattle servants as well.”³¹

The “savages” were confronted by armed gangs – a mixture of colonists, adventurers, and slave hunters – whose action was personally witnessed by the Austrian naturalist. In February 1826, a “bandeira” kidnapped 24 women and children. The Bororo men then began a chase on the exploring crew. “Bandeiras is how is called a detachment of armed people who enter the forest to search, kill or imprison natives”³²

“Soon the savages also came nearby here, and they were so bold that they came close to the house, but the dogs, which there are at least fifty here, chased them away. For a while, we had been living in a situation of occupation, since no one would fetch water without an armed companion, because to do so one would have to go a little distant. Now things get calmer again, and they seem to have retreated to the forests.”³³

In the letter, the traveler not only spends not even a word about the fate of those kidnapped people, but also reports that he has traded the bows, arrows “and other offal of the gourd bororos” with the members of this troop which had fallen into the hands of the Bandeirantes^{TN}.

Two breastplate of Jaguar teeth (*Aduga-a*) and bovine teeth (*Dabira-à, dabirà*).
Bororo da Campanha (Biriboconné),
Paraguay River, Mato Grosso, Brazil, circa
1825. Jaguar, cotton and resin teeth and,
respectively, bovine teeth, cotton; total
length 129 and 85 cm.

Natterer Collection.

Even If Natterer has defined these parts as headbands, its use is documented only as breastplate. The aduga-a were made with 4 Jaguars canines flanked by 4 to 5 molars. These ornaments were not specific to clans and could be used by men and women. In the same way as the headbands, the breastplates are related to the funeral rituals. This certainly does not count for the specimens for the teeth of oxen, which were probably acquired by the Bororo when working as cowboys of the large farms. (CF)

Weltmuseum Wien

²⁹ News, n.d. [after April 1826].
Naturhistorisches Museum, NHMW,
History of Sciences Archive.

³⁰ Johann Natterer to Wenzel Philipp
Leopold Baron von Mareschal, Caiçara,
June 16, 1826. Imperial Archives. Idem.

³¹ Idem.

³² News. d. [between February and June
1826]. *Weltmuseum Wien* Archive.

³³ Johann Natterer to Wenzel Philipp
Leopold Baron von Mareschal, Caiçara,
June 16, 1826. Imperial Archives.

^{TN} Translator's note: Bandeirantes were
17th-century Portuguese settlers and
fortune hunters in Brazil.





Two clarinets (*koá*).
Bororo da Campanha (Biriboconné),
Paraguay River, Mato Grosso, Brazil, circa
1825. Cane, bottle gourd, feathers, resin,
horsehair, cotton, circa max. 40 cm.
Natterer Collection.

During the funeral ritual of the
Eastern Bororo, the Jaguar hunter, who
incorporated the soul of the deceased,
received from his father or his brother-
in-law a clarinet with a pavilion made of
bottle gourd, which represented the voice
of the deceased in the ritual. All these
instruments had clan-specific adornments
and were kept hidden from the looks of
women and children. At the end of the
festive dinner, the Jaguar Hunter received
a clarinet equal to the one used during the
funeral ceremony (CF)
Weltmuseum Wien

Head Adornment with nape cover.
Makuna-ui, Guaianas, border region between
Brazil/Venezuela, circa 1830.
Feathers, dried bird skins, vegetable fiber,
length 96 cm.
Natterer Collection.

Adornments in feather are used in Guaianas,
above all, and in some indigenous groups
exclusively by men and in context Ritual. In
the shamanic context, feathers and dried birds'
skins allow to visualize the close connection
with passeriforms' spiritual beings, the favorite
auxiliary spirits of the shamans. This head
adornment made of a ring to which is fastened
the headdress with feather and a nape cover
made of parts of dried bird's skin is typical
from the border region between Brazil and
Venezuela. The ethnic attribution to a group
called Makuna-ui remains unclear, however:
Although there are the Makuna in southern
Colombia, the adornments in feather that
they use nowadays correspond to those of the
Tukano groups, and if stylistically with enough
clarity of the present piece. (CA)
Weltmuseum Wien







Belt used in dance.
Avá-Canoeiro, eastern Brazil, circa 1821.

Vegetable wool, animal claw, seeds,
length 141.5 cm.

Pohl Collection.

Regarding the Avá-Canoeiro, Pohl observes the following: "These are one of the most numerous, wildest and cruellest tribes; they present a robust body structure, they are warriors, ruthless, obstinate to death in their purposes, and a resentful personality. [...] With envious eyes, the settlers look steadily and generically at the Indian possessions, which appropriation awaits great riches. It was often heard the complaint that the Indians, who after all had given up much of Brazil, continued to possess the best land and needed to be exterminated [...] So it is no wonder that the poor Indians also took their measures to ensure their own safety, measures that aim to exterminate enemies, or at least keep them away through fear and dread." (JEP)

Weltmuseum Wien

6. Epilogue

Over the course of his 18 years in Brazil, Natterer has twice faced the threat of seeing the expedition interrupted by his superiors' order in Vienna. At the first time in 1821, the contingency of Sochor's disease in Ipanema and the replacement of Ambassador von Stürmer in Rio favored his stay. But on the second one, in 1826, Natterer simply made a decision that, though logically correct (returning through Pará), it would come to Vienna as a "fait accompli," that is, as open disobedience. Three years later, in 1829, the naturalist expressed to his brother the fear that his prolonged absence would discredit him before the authorities.

"If my decision is disapproved in Vienna, if my steps, which long only for the beautification of the Cabinet, are misunderstood, and if, instead of reward, or perhaps better, rather than expressions of satisfaction, I have to expect discredit when someday I ever get to Vienna, then I beg you to let me know in time. I will then be forced to say goodbye to you forever. I will then spend the rest of my days in Brazil. One person alone only needs a small piece of land to live; the land produces in abundance when planting. Brazil is so frighteningly huge, and how little it costs in many places a square mile. I want to end my days in peace."³⁴

Two years later, the naturalist's prejudices concerning simple people did not prevent him from marrying the Brazilian Maria Josepha do Rego (1807-1837), from Barcelos (Amazonas). Little is known about the circumstances of this marriage, which took place in 1831. With Maria Natterer she had three children, of whom only her daughter Gertrude had a long life (1832-1895). Two years after his return to Vienna, the naturalist reports his wife's early death.

"On March 30, 1837 she gave birth to a healthy boy. In late pregnancy, she had pains all the time on her left side, around the diaphragm. The doctor did not want to apply bleeding, but after the delivery, the situation worsened. A severe cough and a fear of tuberculosis took place. I had to go to Karlsbad at the end of August, and I sent her to the camp. (...) [W]hen I returned on August 2 from Karlsbad she was bedridden and worse. Tuberculosis was formed and was advancing rapidly. Anyone could see how she lost weight, and on December 8, the unfortunate woman left. She who had followed me all the way until here to find an early death in our hostile climate. Three months later, my boy followed her with pneumonia, which occurred due to the nurse's negligence. Now I only have little Gertrude, the Brazilian (...)"³⁵

In the end of 1835, the year of Francisco I's death, the Office of Natural Objects was reorganized and all places for curators were reoccupied, except that Natterer did not occupy any of them. In a letter to Rochus Schüch, the librarian who had accompanied Leopoldina to Rio de Janeiro and then D. Pedro II's teacher in that city, the naturalist regrets his lack of prestige.

Two Adornus for the occiput
(*Baatsch*, "Heron"). Bororo da Campanha
(Biriboconné), Paraguay River, Mato Grosso, Brazil, circa 1825.

Feathers, cotton, vegetable fibers, max. length 48 cm.

Natterer Collection.

Johann Natterer describes the way to use these head adornments, made of heron feathers and birds of prey, as follows: "First the hairs are trapped in the back of the head, then horse hair adornments tied there, and then are fastened in the beam several of these adornments in feathers with the feathers arranged vertically, as if it were the halo of a saint. Among the eastern Bororo of the 20th century, the possession of heron feather ornaments (*báie ariareu*), similar to the Baatsch of the Bororo of the campaign, was exclusive for men of the *iwaguádu-dóge* clan. (CF) Weltmuseum Wien

³⁴ Johann Natterer to Joseph Natterer, Borba, 21/28 December 1829. Vienna City and State Library.

³⁵ Johann Natterer to Johann Carl Hocheder, December 30, 1838. Vienna City and State Library.



"Here in the Cabinet everything stayed with no changes (...) and I am the curator's assistant together with my brother – no more than this. I continued to follow my long journey of 34 years of services well-done to the emperor, and of a painful trip of 18 years in Brazil where I lost my health and frequently put my life at risk. Dr. Pohl was recently appointed curator – although he had never served in our Cabinet – and earned personal bonuses, also received from the Brazilian government the Order of the Southern Cross."³⁶

More than an invective against Johann E. Pohl, Natterer's letter expresses a sense of dismay with the clamorous injustice he has suffered.

In 1827 Natterer had drafted a letter to Langsdorff, but he crossed out a passage that, because of that, was never read by the addressee, which revealed to be premonitory:

"Your Majesty has made me understand his very high desire of not prolonging my stay in Brazil more than necessary. It would have been more appropriate to strengthen a fool like me, who has forsaken his happiness and domestic peace, his relatives, to have his life or his health at stake daily in a warm, uneducated country, and grow old prematurely under hardships and difficulty for the sake of natural history. (...) Unfortunately, however, my pain, my inner lament was good for nothing, for the lyrics that announce my destiny are cold and without feelings."³⁷

Until his death in 1843, the great collector received more demonstrations of recognition abroad than in his own country, Austria.

Two centuries after the start of Natterer's expedition, the eclipse of this important character has rapidly been overcome. The book the reader has in hand is the very proof of this breakthrough.

³⁶ Johann Natterer to Rochus Schüch, Vienna, March 27, 1839. Vienna City and State Library.

³⁷ Johann Natterer a Georg Heinrich von Langsdorff, Vila Bela de Santíssima Trindade, 23 de setembro de 1827.

Two correspondences of Natterer

Johann Natterer to Karl von Schreibers [draft of a letter]

February 20-28, 1831 / August 22, 1831

Marabitanas [São José de Marabitanas] / Barcelos [Barcellos]

Weltmuseum Wien Archives. Listing: 38/6-8, 39/1-16, 40/1-8, 41/2-4

Y[our] E[minence] must be supposing, based on my latest plan communicated in Borba on June 29th of l[ast] y[ear], that I find myself now in the upper Amazon near the borderline with Quito. However, several circumstances forced me to modify my plan and to temporarily choose the Negro and Branco *Rivers*³⁸ as a destination for my researches; and now I am at the northernmost point of Brazilian possessions by the Negro *River*,³⁹ on the Colombian border⁴⁰.

Due to a misunderstanding, the boat established for my transport from Borba to *Barra do Rio Negro* only arrived in Borba on August 20. Because of the arrival of a merchant from Mato Grosso on the 23rd and some letters I received from him which took me one day, the⁴¹ 24th, to answer⁴²; my departure was postponed to the 25th when I finally left Borba. The boat had two masts, few oarsmen – only five – and Madeira River's water level that month was already quite low; and flowed very slowly so that we only advanced a little.⁴³ Only when its water level is high, in the months of February and March, does it flow quickly, carrying with it an immense number of tree logs that follow the stream in an almost unbroken row – hence the name MadeiraTM.⁴⁴ They are usually cedar trunks from the upper Madeira, and many come from Mamoré *River*. These logs accumulate in great disorder upon each other in large banks near the waterfalls, especially below *Salto Theotonio*. Often, almost daily⁴⁵ flocks of large terns arrived, ster[na] flavirostris magnirostris Ill,⁴⁶ sitting on these logs, which are repelled by the underwater sand-banks. The birds were heading to the Amazon stream. Sometimes ducks and other birds also passed by. The river was occupied on both sides by limited number of houses and plantations, which the inhabitants were from Borba. We travel at night.⁴⁷ In the morning of the 26th I was right before Uachinin Island, where there is a Muras Indians' *malloca*. *Malloca* means a collection of several huts, often only three or four. All day the wind blew against it. Therefore, the trip went very slowly. In the evening, we docked in Murúmurútuba, a Mundurucus Indian *malloca*, and my guide, a soldier from Barra,⁴⁸ wanted some of them to board and row, but he did not succeed, and we resumed the trip at night. Before breaking the 27th day, we found, on the right side, Madeira's tributary which on the map of Arrowsmith is called Furo dos Topinambaranas. Here it is simply called Paraná-mirim da Canomá. In the rainy season it flows very fast to the east and where other tributary meet it like the Canomá, the Abacaxi and the Maué, which banks are inhabited by Mundurucus and Maués.⁴⁹ Maraiá Island is on the left,⁵⁰ and later I moored on the property of Borba Mayor, Manoel Ferreira de Faria, a European and new friend. He has large tobacco plantations that he cultivates with Indians he sought on the Jupurá and Branco *rivers*. He has a skilled blowgun shooter from the Jurupichuna nation - black-faced, because they tattoo in black the region around his mouth, some even under his eyes.

³⁸ To reproduce the original letter draft with maximum fidelity, I have italicized all the words originally written by Natterer in Portuguese. I have retained its original spelling, in addition to the spelling of the names of indigenous places, rivers, and ethnic groups [Translator's note, L.M.]

³⁹ by Negro *River* added on the line

⁴⁰ followed from the province, today state of Venezuela, crossed out

⁴¹ one day, the added over the line

⁴² It follows the same, crossed out

⁴³ so... little added on the line

⁴⁴ TM Translator's Note: madeira means "timber" in Portuguese

⁴⁵ hence... Madeira added on the line

⁴⁶ almost daily added on the line

⁴⁷ magnirostris Ill.added on the line

⁴⁸ We... night added on the line

⁴⁹ my ... Barra added on the line

⁵⁰ It follows Right after that stays, turned off

⁵⁰ Is on the left added on the line

In the morning of the 28th, we were still just less than 3 miles from the river mouth. Plantations were then very rare. Then it came a weak and favorable breeze with which we slowly sailed ahead. Near the river mouth a beautiful landscape over the Amazon River emerged, stretching eastwards like a bay in the sea; ⁵¹ only on both sides was the horizon outlined itself in the distant and bluish frame of the forest tops. The Madeira River, wide in this stretch, has in its mouth a shallow island on which large turtles lay their eggs on its sand banks. We docked on the left bank, at the river mouth right next to the Amazon River, which twisted its waves there in its rapids. At this point, there were many dolphins, especially the small ones, but they were very hard to harpoon. I had to spend the night in that place because the guide had already spent a whole day hunting again. At dawn an incredible swarm of huge gnats – which were unbearable every night on the Amazon River – visited us. On the 29th, the soldier finally appeared, and we entered the torrential Amazon River. The rowers could barely help. We drove on the north side, by the bank of a long *island, Macacos* (monkeys) *Island*, and stayed overnight in front of the mouth of the Uautá River.

On the 30th the ship was pulled by its line; in other words, a long line is carried forward by canoe and tied to the tip of a tree, then carried back to the ship. This rope is then pulled until the vessel reaches the fixed end, where it is tied to that same tree so that the first rope may be released. One can easily imagine how slow the journey is this way. We could reached the south bank again with the help of a light wind, and stayed overnight in front of the western tip of *Macacos Island*.

On the 31st, we had an east breeze, which then got stronger. The river with an enormous width was at this spot an islandless section, while the bank to the north was still high and occupied with forests. To the north was Matari, a Muras mission, with a chapel kept from Serpa. We then sailed toward the northern bank, where the river had a dark brown color. The water was from the Negro River, which only in the region of ⁵² Serpa completely loses its color. In this place, there were farms, ranches, or plantations belonging to Serpa. The Amazon River was low, and very often big and small islands, often made up of tall reed vegetation, not infrequently accompanied by *trichechus* TM for which this vegetation is food. With the strong east gust, the river raises high waves, but whenever the wind settled, the torrential flow of this river makes the surface smooth. The voyage is very dangerous by the riverbanks, in the many places where those banks are made of quicksand, which they are worn out by the river, and collapse along with trees that are in there, sinking ships and people, of which many examples are told.

In the afternoon of September 1st, we passed a marshy stretch over an island where there were bands of orioles (*oriolus icterophalus*) and some little orioles similar to *or[iolus] flavus*, which magnificent yellow caught the eye from afar. A wide frieze around the eyes, the beak's surroundings and part of its face are featherless, wrinkled and black in color. Both types of birds are the only ones I have added to my species list ⁵³ on this short trip. Alternating the Voyage by sail, oars, or by rope we reached the a big island on the 5th *Ilha do Lago Real*, because in it there was a big lagoon connected to the river. We traveled to the n[orth] side of the island. On the 6th we passed the mouth of the lake, where there was a free-trade zone for salting and smoking *pirarucus*. There, before the bank of the Amazon, it started to get higher and higher with some elevations, and there were several farms. There was also a boat sailing west. In the afternoon, we reached Puraquéra Island, which we left at north passing between it and Lago Island. Almost every day one could see many dolphins, especially the small *lucuschi* species, as well as turtles.

⁵¹ Improved of the sea

⁵² which ... of added on the line

TM Translator's Note: *trichechus* is the genus of manatees

⁵³ In the syntax of the original German, here impossible to reproduce, the verb I **increased** appears crossed out and written elsewhere, indicating that Natterer extended the sentence by adding on this short trip. [L.M.]

On the 8th day we were once again in the large river, but Always on the north bank of⁵⁴ *Lago Island*, and we saw later with daybreak - far west in the mouth of Negro island - later the island of Maracatá, already in the interior of the mouth. The Negro river has only one outlet. Both the Brazilian Chorography and Arrowsmith's map are wrong when they assign two river mouths. Soon a favorable east wind rose, with which we sailed to the bank on the north - which is rugged, occupied by sparse huts or country houses. We crossed a strong current at full sails, that is, using the two sails the boat had. On the left was finally the end of Lago Island and a little farther down, Catalão Beach, which is the right bank end of Negro River, that we then entered. When viewed from above the water was very dark, almost black. We took advantage of the wind and docked only at 11 AM near a country house to get⁵⁵ something to eat. It is strange that here - so close to the Amazon River, and all over the Negro River - one cannot find mosquitoes. In many places, there are *piun*, known in other provinces under the name *boranudo*,⁵⁶ and *maruin*, already sent with the name bariguide Paranagua, and mutuccas (biting moscardos), but only by day. The nights are quiet. In the afternoon we hoist the sails and soon we reached *Lugar da Barra*, built on several hills on the Negro River left bank. A small fort defends the entrance with 16 cannons; it was built of rocks on a rocky but deteriorating hillside. The river here is very wide⁵⁷ and flows extremely slowly. Only beyond Barcellos does it have a strong current. I was welcomed in an extremely friendly manner by both the military commander, Colonel Joaquim Felippe dos Reys, as well as the general ombudsman, Manoel Bernardino de Souza e Figueiredo, and excellently treated by both during my stay. For my next voyages, only a s[mall] boat was needed, and although there was a very huge trade in salted pirarucu, turtle egg fat, flour and sarsaparilla, and piassava - a palm-type fiber with which are made into ropes and cables⁵⁸ - I could not find a barge for sale, because they were traveling for cooking fat, or to the river bays, or lagoons, for salting fish. They had gone to the Amazon River banks, which there it was called Solimões River. The Ombudsman, seeing the predicaments and delay of my journey, arranged to lend me a boat from the public funds, and finally decided to sell me one. Equipping her also took me a few weeks, so that I was only ready to sail in early November. It was already the beginning of the rainy season and the Amazon River was flooding, so I already found all flooded beyond Ega, and because of the great current, I would certainly have to take three to four months to Tabatinga. Experienced men advised me against this trip, especially Colonel Zany, who had already traveled through both rivers. He advised me to choose the Negro River, because its water rises later, and it never has strong currents. Co[lonel] Zany, a native of Livorno, only arrived in *Barra* a few days before my departure, and very ill with a sever malaria. His collections were on his Manaqueri farm⁵⁹ by the Amazon River. Right there in *Barra* he had few birds. Among them, I saw little news. Most notable was a large and magnificent trogon, which might have inhabited locality too, but which I have never been lucky enough to obtain. He had his animals completely stuffed, and for this purpose, he took with him a taxidermist on his last trip to Rio de Janeiro.

54 it follows **island** in German, crossed out

55 it follows **here**, crossed out

56 it follows **known.... boranudo** added at the bottom of the page

57 it follows **and the right bank is out of cannon range**, crossed out

58 **and piaçava ... cables** added at the bottom of the page

59 improved of **Manacori**

During my stay in *Barra* I obtained 23 specimens of fowl (which I have not had yet),⁶⁰ among them the *psophia crepitans*. The *psophias* dispatched from *Borba* are definitely from distinct species that do not exist here, but perhaps on the southern bank of the Amazon. A *corvus*, similar to *cayanus*, *todus regius*, *bucco calcaratus*, *melanoleucus*. Of mammal specimens, a young *molossus* and a marmoset species with bald and black face and ears back of the head, neck and chest; and from that particular region⁶¹ a pointed stripe in a beautiful white that goes down from the chest to the belly⁶², as well as shoulders and front paws. The rest of the upper body is brownish gray and mixed with black tones; the upper side of the tail is black, the lower and the tip, in addition to the rest of the belly and the inner side of the hind legs are ocher in color. *Cavia accuschy*.⁶³ From amphibians only a 4-foot lizard and the sooty *amphisbaena fuliginosa* that inhabits the houses.

In the morning of the 5th I was finally able to leave *Barra*. A favorable east gale allowed the use⁶⁴ of the sail that drove my boat, and soon we passed by *Taruma*, where a former governor kept a plantation of cinnamon trees and puchury on his property. Soon a heavy rain fell that stretched until dawn.

On the 6th the river narrowed and was covered with many rocky islands; both banks were mostly forested with rocky edges and contiguous sandbanks because the river waters were going down. Above this region, called *Cajútuba*, the river enlarges considerably and is covered with many forested islands. We then follow the right bank or near the islands facing it. Regions with very little to hunt, a few ducks of the species number 701 or some cormorants. Even caimans, so abundant in the Amazon and *Madeira* Rivers, are rare there. Only on day 9 did I get the first new bird, a hummingbird very similar to *s[...] viridissimus*. The right bank was often craggy, with low and sparse forests, peasant houses bordered⁶⁵ by frequent deposits of red sandstone. One could no longer see the left bank; it was hidden by the many islands. On the 13th a new *psittacus* was finally shot down, similar to *aeruginosus*.

On the 14th during the breakfast stop, over a large red sandstone dump, I heard a strange bird voice resembling the creak of an old, rusty pinwheel. The bird was called a *gainambé*, which no one could capture. Only in *Barcellos* was it knocked down, and in it, I recognized the *ampelis carunculata*. In the afternoon of the same day we passed⁶⁶ by the small town of *Airão*, which consisted of 9 to 10 palm-covered houses and a church. We headed further to the mouth of the *Jau* River, where we had to stop nearby because of an approaching storm. There was hardly a day when one or several storms did not fall.

60 it follows **species**, crossed out

61 **This particular region** added on the line

62 **To the belly** added on the line

63 **Cavia accuschy** added on the line

64 **The use** added on the line

65 it follows **many**, crossed out

66 improved of **before the**

On the 16th a stream between rocks gave us a hard time. In the afternoon,⁶⁷ after a long time, the left bank of the river became visible again to the northeast. On the 17th, a new species of monkey appeared, with a very hairy and noticeably short tail. It is called here *vacary*. I do not know if it has already been described, but I must suppose it has. Since it appears in the north region as far as Marabitanas, it is possible that it can then be found near the Orinoco as well. The canine teeth are very large and turned outward, well away from the misaligned front teeth, of which the lower ones are very long. At its nape, all the hairs of the head point forward and form a visor over the eyes. It has a thick beard on the cheeks, the whole upper body strong and with long hair, especially on the upper back and arms, hair over 4 inches. Tail very hairy, with more density and strength at the tip; it has graduations.⁶⁸ The total length to tail is 2 feet and 1 11/12 inch, the tail length starting from anus is 6 inches. The head, lower half and inner side of the upper arms, forearms and hands, as well as the lower half of the calves and feet are black. Its back and upper arms are very light ocher color, which transit the lower back to a dark ocher color. The tail, thighs and upper half of calves are chestnut brown. The dark parts of the face and ears are black. Several specimens have the upper arms completely black and the entire upper body light brown.⁶⁹

The river was covered with many sandbanks that forced us to make a big roundabout. On the 18th, we arrived at Villa de Moura, formerly called *Pedreira*. The edge consists of large blocks of red granite. This Villa, like all the following ones, is on the right bank of the river and consists of approximately 30 to 40 palm-covered houses⁷⁰ – many of them poor, partly half-fallen huts – besides a church. I went to the mainland to look for the judge to whom I had an order, but I could not find him, for he was in a field. There was only the commander of a small indigenous militia. Here, as in many other places on the Negro River, hammocks of *meriti* palm yarn or *tucum* palm were beautifully crafted.

The previous day two large barges passed by here with live oxen from the imperial cattle establishment on the upper Branco River, headed toward *Barra*. Due to a 15-day trip, it is common for oxen to arrive in Barra slim, where pastures are also rare and therefore, it is hard to recover them. These boats make only two trips per year, and the consequence is that fresh meat is rarely obtained in *Barra*. The then ombudsman, to solve this shortage, has already set up two inland expeditions to discover grassland areas near Barra; however, because of the guides' ineptitude both were unsuccessful. We left at noon and stayed overnight on a long island, where at dawn two Indians escaped, (...) which often leaves the chief of the ship entirely alone. Luckily, they did not steal any of the hunting canoes from me. On the 19th in the afternoon we landed in a [*garapé*] [sic] (so are the small brooks called, often they are simple water wells), where the crew collected palm leaves to better cover the boat, since it was raining everywhere.

67 it follows **finally**, crossed out

68 it follows **almost as a [...][...]**, crossed out

69 **Total length... light brown** added at the bottom of the following page

70 it follows **ou choupanas**, crossed out

In the morning of the 20th, the mouth of the *Branco* River was to the north. Later we found a large boat that continued rowing slowly near the other bank. I quickly wrote a letter to the militia commandant in Moura and informed him of the Indians escape, because one of them owed me, and sent it to the ferry, and then I learned that it came from *Barcellos* and belonged to Colonel Zany, it was loaded with piassava, flour and cotton. With heavy wind and rain, we arrived at night among many shallow islands in *Carvoeiro* village, which consisted of some decrepit huts. At most two houses seem to have some order. In vain, I looked for a *court judge* or militia commander to arrange some people for me. All were absent, on plantations located several days away, and only two male inhabitants were present. With one, I traded some turtles.

After a continuous journey between islands, on the 26th we reached again solid ground of the right bank. On the 27th, we were below *Poiares*. Around noon, a strong windstorm was brewing from the northeast, which we took advantage of to advance the sail. At two o'clock, we passed *Poiares*, a small village completely decrepit, still made up of very few remaining houses. The river edge in this place is high and steep; a long walkway of tree trunks descends from there to the river. We spent the night way afterwards on an extremely high bank, where at dawn a small group of kinkajous jumping from a tree to another.⁷¹ People describe this animal as a species of monkey. Although it was bright with the moonlight, we could not shoot any of them down. Only in Santa Izabel one of these animals came to my hand, and I saw that it was a *caudivovula vivra*. During the day, they are usually hidden and quiet.

On the 29th, we finally arrived in *Villa de Barcellos* under heavy rain, it was located on a very high and steep bank. This now decaying *Villa* had once been the central site of⁷² the *Negro River Captaincy* (now downgraded to Commarca) and the governor's residence. Of the old existing buildings, such as the governor's palace, the grand barracks – the big building where the Spanish and Portuguese commissioners' conferences were held to delimit the boundaries of both domains and of many other private houses – only the foundations and some stakes remained. Under the rule of a certain Gamma, the residence was moved to *Lugar da Barra*, this was the reason of the complete decay of this prosperous 30-year-old villa and all the other Negro riverside *villas* and places. Added to this was the poor treatment of the Indians and, consequently, their evasion into the forests or elsewhere, and the complete lack of religious everywhere on the *Negro River*, which consumed the complete decay and depopulation of this part of the province. On the riverbank, there are still parts of two marble obelisks (*landmarks*) that could not be transported to the inland border because of their heavy weight, exactly like the ones I saw below the *Jaurú*'s mouth nearby the *Paraguay River*.

Here I completed my crew and proceeded on my journey the next day. Here the river as usual, is filled with many insects and must be so wide that it takes a day's travel to reach⁷³ the left bank. In many stopping points and even during the shore trip, we were harassed by a large number of little bees that crawled over the face, especially over the eyes, nose and ear holes, and which, it seemed that they were sipping sweat. They don't bite, but they are tremendously annoying.

⁷¹ jumping ... to another added on the line

⁷² it follows province and residence of the governor, crossed out

⁷³ it follows other, crossed out

In the afternoon of December 3⁷⁴ We passed the town of Moreira, also situated on a high, steep, red[dish] bank; access there was via walkways in the shape of stairway. The place consisted of more than a dozen well-maintained houses and three newly built ones, as well as a nice church covered with tiles. The inhabitants are Manaos, Barés and Jurupixunas. On the 4th and 5th was the trip between islands and sandbars on which we often stayed sat. Rarely one could see there a few terns or birds with a recurve beak. There were no ducks or pelicans, not even the most common birds. All the shores and islands seemed lifeless. On the 6th we finally reached *Thomar* in the morning, the last *villa*⁷⁵ on this river and in decay like all the others. The last session of the *municipal chamber* was happening at that moment. Apart from the president, no *councilman* could read nor write. They sought the *ordinary judge* to whom I had a letter, but he could not read and had to call the clerk,⁷⁶ who is also a clerk to the *chamber*, to the *ord[inary]* *judge*, and to the *judge of peace*. These people heard about my air rifle and asked me to show it to them. I picked it up on the ship and shot with it a board, which made them very surprised. The river has risen considerably from Barcellos; It is still very wide here because of the many islands and the flat terrain, it should be two miles wide. On the opposite left bank is the mouth of the *Padaviri River*, where much sarsaparilla and piassava are obtained; these things exist in the forests, but not as much as to grow them in plantations.

On the 7th day we reached Lamalonga, a small and decaying place with approximately 20 to 30 houses. Everything was abandoned. The few inhabitants were in their plantation houses, only one hungry pig and three cows were the owners. A northern storm forced me to stay here for a few hours. On the eighth day the journey continued for some time along the right bank and past a few peasant huts. My black man shot 3 pigs, *taitetu*. This was very welcome as the usual food consisted almost⁷⁷ always⁷⁸ of salted and dried pirarucu. Soon we were traveling between islands, because the path then went towards the left bank.

In the morning of the 9th, the left bank was seen, and above the tops of its north-northwest forest five very distant mountain peaks, the first ones since the departure from Barra. They are part of a mountain range through which the *Padaviri River* goes through. In the afternoon only a narrow arm still separated us from the left bank; here and there one could already see some granite veins near the bank. On December 10th we completed the trip to the left bank, solid ground, but very low land occupied by a few peasant huts, and soon we arrived at the light brigade commander's residence. He was the commander of all upper part of Negro River, Lieutenant Colonel Julio Manoel da Fonseca Paixão. It sits on top of the slope of a red granite deposit, covered with palm straw like the other huts. He presented me with three blowpipes from the *Padaviri River* Indians, including one measuring 10 feet and 3 3/4 inches in length. They are made of an excavated trunk of a small palm species, into which is inserted and fixed another excavated small trunk of the same species. Almost every nation on the upper Negro River and its meek descendants use this weapon with the little poisoned arrows just as the ones I have already sent. In the mountains next to the *Padaviri*, and as it seems in all mountains near the equator, one can find the magnificent cock-of-the-rock, *pipra rupicola*, much coveted to be skinned because of its beautiful feathers with which the hammocks are adorned. From the feathers of this bird's back colonel Zany made the imperial cloak for Dom Pedro, formerly composed of toucan necks. For this purpose he consumed 200 cocks that he ordered⁷⁹ to fetch from the mountains along the *Padaviri*, *Marauiá*, *Cavabury* and *Marié* Rivers⁸⁰.

74 added on the line

75 The last added on the line

76 it follows of the chamber, crossed out

77 it follows only, crossed out

78 added on the line

79 it follows on the 11th, crossed out

80 To the rivers added on the line

Then the Negro *River* narrowed, and in several places the other bank was already visible. Occasionally granite veins jutted out. On one of these rocky, cliff-like peaks similar to⁸¹ a sandbar was a flock of more than 500 specimens of number 780 nightjars that I called cap[rimulgus] temminkii, which, scared by the ship, from afar resembled a flock of small terns. Since the waterfalls of the Madeira *River* I had not seen these nightjars. The forests were more abundant on this side, and several new birds were discovered as a beautiful jackdaw, *oriolus chrysoccephalus*, a beautiful parrot such as *psittacus accipitrinus*, the magnificent golden green that I saw next to Mister Zany, and a rare manakin which side-tail feathers end at a long, unbarred, hairy end; prominent feathers of the beak, and neck. Very yellow cheeks, front neck and chest, [...] yellowish-crimson crown, nape and upper back with silky sheen; other feathers on the back, wings, tail and lower tail black. With a length of 7 inches, 8 inches width. The tail protrudes 2 1/4 inches beyond the wingtip. Here and there were peasant huts by the bank, and the river was almost without islands.⁸² On the 14th we reached the town of Santa Izabel near the left bank, composed of large granite masses, approximately 30 houses, many collapsed, but some in the process of being rebuilt, because for this purpose an order was published covering all the buildings, towns and villas by the Negro river. Until the 16th I had to wait for a rower and a pilot, because here the many currents that required a trained and experienced pilot had already started because of the freq[uent] rocks in the river. On the 18th a high mountain north-northwest became visible, which should be located below the Maçaraby near the n[orth] bank. Farther west was a s[mall] mountain, *Morro do Jacaimim*, and a little farther south the peak of four isolated mountains, *Tajaçu rocca*. By day 19 these mountains were no more than 1 1/2 miles south of the river; they seemed to consist entirely of gigantic masses of granite, only occasionally covered with forests.

On the 20th we had breakfast at *São Antonio do Castanheiro Novo*, which consisted of a s[mall] church and two houses, and several being built. The *Marauiá River* is below the town, not above according to the Arrowsmith's map. In the evening we passed the rope down a strong stream, *Pirauba coara*,⁸³ and spent the night in Carmo, a place abandoned because of an evil fever, over a gigantic granite shaft on the left bank that jutted itself vigorously toward the river.

On the 21st the mouth of the *Cavabury River* was on the right and we remained on strong rapids below Maçaraby. On the 22nd we overcame these rapids and many others, because the river was dotted with rocks, and we went toward the right bank where Maçaraby is, also known as Loreto. But below the area we had to go through a waterfall, which took a lot of work and demanded that the commander summon all the local people to help. A short time before the place had been plundered by a large number of savages of the Macú nation; but, as they were perceived before, they all fled to an island right in front. But four Macus dared to head toward the island in a stolen canoe where they were shot. From the captured weapons I traded a heavy staff. Since then people have lived on this island, and they only go there during the day because the savages had already retreated. I got a new pilot there and strengthened the crew. On the 23rd we crossed again to the northern bank, and a high mountain range became visible to the west called Uariu, located near the *Curicuriau* tributary. On the 24th in afternoon, we reached *São José*, a place on the n[orth] bank consisting of a few houses. That's where Arrowsmith announces *São Pedro*, *Castanheiro Velho*, *São João*, and *São João Nepomuceno* no longer exist, and *São Pedro* is on the right bank, about half a mile below the mouth of the *Curicuriau River*.

81 it follows **high**, crossed out

82 it follows **but there was**, crossed out

83 **Pirauba coara** added on the line

On the 25th the Marié River was to the south, at noon was southwest a long, forested hill, Camundé. Far to the west emerged the blue ridge of a high, isolated, cylindrical mountain, Supáni, a little to the north and very close to the two approaching Uariú Mountains, which surrounded themselves and which peaks were shrouded in clouds. On the 26th we finally reached *São Pedro* on the south bank, which consisted of granite layers. A wretched place where the church itself was broken down, with at most 6 houses. Here I had to wait for people and a pilot. From there I also took an old, very experienced maritime pilot.⁸⁴ There it was shot a new pipra, it was all-black with bright blue crown.

On the 29th we passed by the mouth of the *Curicuriau* River, of vigorous rapids and which the water is much darker and redder than the *Negro River*, on which right bank stood above the forest many pointed and conical ridges of the Uariú mountain. In the afternoon we had before us the locality of *Camanau* (*São Bernardo* on the map). Here the river had many rocky formations, partially covered with bushes and full of sandbanks, among which the river was roaring loudly. With great effort we passed a strong current along the rocky left bank, under the residence of a farmer, and then we continued to paddle on; but as the night broke, [because of] the great rapids and waves that we had yet to overcome, we remained on a small island, where a great storm coming from the northwest soon brought heavy rain. On the 30th I requested people from *Camanau*, and, reinforced by them, the work finally began. The line was carried four times from rock to rock, and so the ship was pulled across the surf until we reached the left bank and a sandbar, where on a small elevation *Camanau* is located, which has barely half a dozen houses. The church there is also broken down. There, half of the ship's load was removed, because it was necessary to cross a strong fall (waterfall). For more than three hours people worked to cross over, and they had to unload the rest of the shipment on a rock where the commander⁸⁵ still sent half a dozen Indian women⁸⁶ to help pull the rope. The shipment was then boarded again, and we departed to the mouth of the *Uaianali* where we worked to cross with two ropes until sunset; in vain, because the water was very shallow. We spent the night underneath side of the boat, very uneasy with the roar of the choppy waves.

On the 31st I ordered to carry half of the shipment above the waterfall, so today it took us less work to get there with the ship. We then traveled to a rocky island, *Uariúcani*; we work hard to reach its north bank. Five Indians that I had requested to *São Gabriel* militia's commander the day before came to meet us. With a lot of work, going from one rock to another with rope, we arrived again at the [north] bank, until the *Veado Waterfall* (*Quaçu ritiman*) which we were lucky enough to go through it quickly. The river here runs very fast and is covered with many rocks. The nearby *Pederneira Waterfall* gave us exhausting work for several hours, as the channel was very shallow, and the ship always ran aground on the rocks.

⁸⁴ From there... very experienced added on the line

⁸⁵ it follows sent, crossed out

⁸⁶ it follows to the ship, crossed out

On January 1, 1831 we overcame after hard work the surf near *Manau Tapera* and *Santarem*, and finally came to the infamous *Cajubi* Waterfall - a large, shallow and steep granite shaft that⁸⁷ stretches wide and extensively⁸⁸ into the river and causes a considerable waterfall with strong waves. The ship was completely unloaded, then hoisted by a double rope and reloaded. Then came the *Uru* rapids, and then a greater one called *Matamatá*, by the bank of a hill covered with arrow canes. The rapids was strong and the channel not deep enough, and full of rock tips surfacing the water. During the work the ship was suddenly propelled diagonally toward a rock. Luckily the rope didn't break. With a lot of work, it was detached, and finally crossed the current toward another one, 100 paces away, called *Gainambé*. Luckily this obstacle was also overcome, and the ship then went from rock to rock to the left bank, which we reached at night.

Throughout the day one could see in São Gabriel a medium mountain and farther west a high mountain, the *Bitipanni*⁸⁹; to the south there was already the *Serra Uariú* with *Supani* in cylindrical form. The edges were steep. On January 2, we arrived at *Furnas* Waterfall, large and tall blocks of granite that cut the river crosswise along a considerable stretch. We then passed through several smaller rapids such as *Itammon*, *Arapáçu*, *Taiassú*, *Gaiubi*. Then the river became wider and less rocky, in a way that one could paddle through a stretch. There was a beautiful view of the *Bitipanni* mountain range to the northwest. Then we went through the old town of *Nossa Senhora de Nazaret*, where there was still a house on a hill. Soon one could see nearby some São Gabriel houses on a hill, as well as a fort. The great *Crocuy* waterfall – or *Corocuby* – roared and churned violently and blocking the river across. I landed below it and saluted the Brazilian flag of the fort with 21 musket shots. The fort's commander⁹⁰, a captain of the light militia⁹¹ the judge and the lieutenant of the light militia came toward me, welcomed me extremely friendly, and led me into the commander's residence. He offered me the same⁹² house as a dwelling, for there was no other house; nevertheless, I thanked him for it and returned to the ship at night. On the 3rd, my ship was unloaded, and the load was taken beyond *Crocuy*, and the ship was pulled with a double rope over the waterfall, which had a considerable drop. For this task the command[er] had sent many people, both men and women, to whom I served *aguardente*^{TN}. The ship was again loaded and driven until shortly before the fort, and over a safe place to dock. The stone-built fort stands on a sizable hill with a granite core; it is a small triangle, without a moat and very low, with only seven iron guns, most without trestles; they give cover to the river.⁹³ The battalion consists of only 7 men. On this and some other adjoining hills lie about a dozen houses. The church, which does not have a door, stands between the [commander's] house and the fort.

87 it follows a big, crossed out

88 wide and extensively added
on the line

89 added on the line

90 fort's added on the line

91 The judge... light added on the line

92 added on the line

TN Translator's Note: *aguardente* is a
generic term Brazilian distilled wine;
brandy.

93 Give cover to the river added on
the line

ZOOT. HERB. FILAT. TINTOR.
SCHOTT ADEMAR No. 1849



HEINRICH WILHELM SCHOTT
Wenzel Liepoldt,
Difenbachia conspurcata.
Pencil and gouache, n.d.
NHMW

HEINRICH WILHELM SCHOTT
Wenzel Liepoldt,
Difenbachia conspurcata, Pará.
Pencil and gouache, n.d.
NHMW



On the 4th, I stayed right there and sent two soldiers in the morning with my Negro gunner, to a distant mountain where there were already cock-of-the-rock, and from there I got males and females, and a young curassow (crax). On the 5th, I left to the *Quartel* Waterfall, which is nearby, at the bottom of the fort; there half of the load was removed, but in the middle of [...] the river the large rope broke, and the ship was propelled back without injury. I then removed all the cargo and doubled the rope; this way we overcame this passage without further difficulties. The rest of the day was worked with rope between rocks, and we stayed above the bare ground where once was São Miguel, next to a plantation with two houses whose residents were absent. On day 6 we passed the strong local rapids of *Caldeirão* (very dangerous when the water is high), then arriving at *Cachoeira do Paredão* that we overcome with double ropes. Soon an opportune east wind rose with which we crossed another strong current with sail and oars.⁹⁴ called *Jurú*. It was decided that it would be unloaded the next morning, but it did not happen, and on the morning of the 7th⁹⁵, the pilot looked around for a way to attach the rope to various rocks. Throughout the day there were many currents caused by the frequent rock gatherings. Ahead was the not-specifically-high *Bitipanni* Mountain, which forest revealed the bare cliff here and there; to the southwest a [small] mountain with forest in front of Santa Barbara (which is not on the map). We stood on a sandbar, where at nightfall thousands of small dragonflies covered the ship's lamps and bonfires. In the morning of the 8th we reached Santa Barbara, a small village made up of 6 houses and a church and inhabited by Vaupés Indians. In the afternoon we pass by the mouth of the important *Vaupé* River, whose inhabitants, Vaupés Indians, cultivate and trade a lot of sarsaparilla. It has many falls. In the first, called *Ponaré*, there is a small village, São Jerônimo. *Uariu* Mountain is still visible, with its peaks shrouded in clouds. The river bended north here and became wider and with few rocks. *Bitipanni* stood southwest over the forest. We stayed overnight on an island near the left bank, which is possibly not far from the equator. *Carokuy's Carocuy* and *Caudal* is [sic] a map error. In that locality there is no flow or waterfall, and this refers to the [waterfall] next to São Gabriel.

At 10 AM we reached the village of Santa Anna, consisting of 4 houses and a church. The inhabitants are Banivas. It stands on a hill which base is blocks of granite. From there you can see São Felipe at a good distance on the right bank, where we arrived with the late afternoon. It consists of 6 houses, without church, it is already collapsed. On the 11th we passed by the mouth of the approximately 2 days trip up, next to a waterfall. They trade fish and hammocks. The Negro River here makes a sharp north-east bend and was occupied by several peasant huts river and docked a little further in Nossa Senhora da Guia, located on a small hill. As it was not too late, I continued the trip. On the 12th we passed by the mouth of the Mabuáby river. There were several peasant huts on the bank. The river was rising hard. In the afternoon of the 13th we passed by São João Baptista de Mabbé, located in front of the left bank. It consisted of 4 houses on a small promontory with rocks at the front. At noon on the 14th we arrived at the tributary of the Xié River, where is São Marcelino, which consisted of 5 houses. Here, as at the mouth of Içana, is a detachment of 3 soldiers to prevent desertions, because both rivers communicate with Colombia. In Xié live the Uarequenas Indians (Uarequenas),⁹⁶ approximately 2 days trip up, next to a waterfall. They traded fish and hammocks. The Negro River here makes a sharp north-east bend and was occupied by several peasant huts.

⁹⁴ it follows **we won**, crossed out

⁹⁵ **on the morning of the 7th** added on the line

⁹⁶ added on the following line

On the fifteenth day, one could see at east, a high mountain which peaks were surrounded by clouds; farther south was the neighboring low mountains, and farther south is a high, pointed mountain which the telescope showed bare white rocks, in which vicinity the Cavabury spring should be. In the afternoon an Indian spotted a sloth on a tree. I made the ship stop to shoot it down. It was a linnaeus's two-toed sloth, *bradypus 2-dactylus*. At noon on the 16th, the mouth of the Dimity River was on the left bank, and the river then turned to the northwest, where soon the São José de Marabitanas Fort was seen was on the right bank, and where the Brazilian national flag fluttered, and I saluted with 21 shots. I was greeted by the shore by the [commander], an artillery lieutenant, and brought to his residence, from which he gave me half as a dwelling, and to where I had my luggage brought the next morning. The fort is at the front of the high riverbank and consists of only two raised ground batteries connected to a covered path, each occupied by 4 iron guns of 4-pound. The entire area of solid ground is surrounded by a stockade. Inside there is a small barrack for a 25-man⁹⁷ garrison, as well as an arsenal and gunpowder deposit. The protection was originally fortified with anti-landslide picket fences, but now everything is well rotted and needs major repair so that very large cracks will not open soon. A little far away, on both sides of the banks, there are 25 houses or huts, besides a small church and the [commander's] residence. The locals are Baré Indians from⁹⁸ the *Marapitammas* tribe (which is actually⁹⁹ corruption from *Baiarépiammas*.) The river here is very narrow and without islands, the banks are flat. From here one can see two of the *Cocuy*'s peaks, a high granite mountain a day's journey upstream from the river. To the east lies at a great distance, 100 the highest peak of a mountain - *Pirapucú*, the one I saw in the river before my arrival¹⁰¹, according to others it's called *Tibari* and *Mabiu*; where on the [eastern] side runs or springs the *Cabury* River, which below the *Maçaraby* or *Loreto* runs to the *Negro* River. A part of this mountain range positions within the *Maturaiá* and *Cabury* rivers' confluence, is called *Onori*, and at its top the rock must form the strange figure of a priest reading a Mass with a sexton behind him. From the fountains of the *Maturaiá* River follows a path to the *Bacimony* River, which flows into *Cassiquiari*. At the mouth of the *Maturaiá* there had once been a military post because of desertion, which was transferred to the mouth of the *Cabury* River. The *Cabury*, *Inabú*, *Marauiá* and *Padaviri* rivers are heavily attended by people who gather sarsaparilla there, and also obtain it through exchanges with the local savages.¹⁰²

⁹⁷ inside... men added at the bottom of the page

⁹⁸ From the tribe ...added on the line
⁹⁹ actually added on the line

¹⁰⁰ Great distance added on the line

¹⁰¹ The one... arrival added on the line

¹⁰² Of the *Maturaiá* ... savages locais
added at the bottom of the page

Being so close to São Carlos, the border between Colombia and Brazil (three-day trip in a small canoe), I could not resist the desire to take a short¹⁰³ excursion there, and at the same time also visiting the *Cocuy* on the way. For this purpose, I had already brought the proper permission from the ombudsman, and the local commander also provided me with the sergeant and two soldiers; and so I left *Marabitana*s on February 4th. Soon we reached a long island that we left to the east. Further on there were on both banks some plantations with their huts, but they soon disappeared. Only the next morning did we reach *Cocuy*, or rather that passage of the left bank closest to the mountain. I took this day and the following days to have a path opened through the forest to the mountain, and to find a section that made it possible to climb the mountain, which was steep and craggy on almost every side. *Cocuy* is an hour's heavy walk east of the Negro River, and yet another hour walking through the enclosed forest¹⁰⁴. At the foot of the mountain side, over immense blocks of granite near cliffs, we came to a less steep place where a trail of thickets on the rock made climbing possible; but before it was necessary to overcome a large stretch of smooth and steep granite, which was only possible by means of a rope that I decided to bring with me again. At the foot of the mountain there are the magnificent cock-of-the-rock, some of which were shot down. Because of the bad weather I could only undertake a second trip to the mountain on February 10th. This time I had a 70-fathom rope carried by some bold Indians above the dangerous stretch. With that rope I was lucky enough to get up there, certainly with great effort and not without danger, and then we climbed flanking those thick bushes, where the Indians who led the way made their way with domestic knives. After a painful climb of almost 2 hours and, above, crossing large masses of granite piled on top of each other, we reached a craggy wall where I sent in vain to look everywhere for a climb. A few Indians went up by climbing up a tree that leaned against this wall, and still headed upwards for a considerable stretch where, finally, bare and vertical walls once again completely prevented the advance. Although I had reached the end of the tree on a quickly made rope ladder, I found that moving from there to a very steep rock and climbing to the roots of a climbing plant was too dangerous, would unnecessarily expose me to obvious danger. The dense atmosphere above didn't promise much better prospects than below either. All the eyes could reach was only forest, north-northeast 3 separate mountains already in Spanish domains, to the east a low-lying mountain, to the southeast the *Pirabucú* mountain already half-shrouded in fog. The not-yet-climbing part of *Cocuy* was blocking the view north and west. *Cocuy*¹⁰⁵ is an immense mass of granite, which has smooth, vertical, forward-sloping rock walls on almost every side, and has very few thickets above it covering the surface here and there; and ends in 3 neighboring smooth peaks. At the foot of the mountain are spider-monkeys, perhaps a mere variety of the *[simiae] paniscus*. Its chest, belly, inside of upper arms, thigh, calf, and tail is yellowish-brown, tending almost to greenish. Black are the head, back, upper arms, hands and feet, the top of the tail and the tip. Female length 4 feet, 4 3/4 inches, of which 2 1/2 feet the tail [...]. On the way to the rock 2 females were shot dead.

103 it follows **detour**, crossed out

104 And yet ... forest added on the line

105 it follows it ends in 3 neighbors peaks,
crossed out

On February 12, the day I left the Cocuy region, my fisherman, who had been fishing at dawn, provided 2 samples of urú mutum, a species of crax. This bird is not uncommon throughout the Black River and lower Madeira, as its melancholy call is heard at dawn from different directions. But on days of certain seasons¹⁰⁶ it stays hidden in the thickest scrub, and even in hollow trees, where it is silent, leaving only at dawn for food. To kill them, the go sneaking past midnight, lit by torori-lit sawdust, after the bird's call until they get very close to it, when they put out the torch and wait until daybreak, and then kill it with the blowgun. Usually meet several. Among fowl birds, a nocturnal bird is considered quite rare.

On February 13, on the way to São Carlos, a caiman I did not have it yet was shot down - smooth-fronted caiman - with its very prominent eyelids above the eyes, very bony and broad, with the long narrow head at the tips, somewhat similar with [crocodile] no. 157, but with much softer harness and very different color.

The river was lowering and had frequent deposits of granite, mainly on the banks. Over many of them were buried several figures about which no one could give information. In the low water Vaupé River, these same signs should be found on the local granite rocks. On the 15th, just a mile from San Carlos, I sent 2 soldiers ahead with a letter to the commander informing him of the proximity of my arrival, the purpose of my trip there, and the character of my mission.

In the late afternoon came the interim [commander] with and a former artillery captain, Don Augustine Lodoguy, who now lived on commerce; They gave me the most friendly [welcome] and accompanied me to San Carlos, where we arrived only after sunset. The commander was indeed in San Fernando, at the confluence of the Atavapo and Orinoco rivers. San Carlos consists of 35 houses, in addition to the 20-men garrison barracks and a small church.¹⁰⁷ The inhabitants are Barés, Banivas and Uerequennas. Opposite San Carlos, on the right bank of the river, is Fort San Agostinho, a long [quadrangle] built of stones, but now decaying and without artillery. The mouth of the Cassiquiari River, which links the Orinoco to the Negro River, is 2 1/2 hours away. On the 17th I traveled there. The direction of the mouth is to the east and the current is strong and there is granite along the banks¹⁰⁸. It receives the Pacimony, Siaba and Bativua rivers. The Negro River above the mouth of Cassiquiari receives the name of Uainia there. Cassiquiari has little traffic, as it takes a month to get to San Fernando. The exchange of correspondence with this place and even the commercial transports take a much shorter way, that is, either from San Carlos going up the Negro River, one can arrive at the villages San Miguel, Maroa and Pimichim inhabited by Banivas. From this last place it is 4 miles of a land way through the forest to Chavita, where one can board by the Temi River and from there through the Atavapo River get to San Fernando. Usually the post office¹⁰⁹ needs 5 days for the entire trip. During my stay in San Carlos a soldier came from Esmeraldas, near the Orinoco, who had gone there to cook turtle fat. I bought two large river turtles from him and saw that they were not different from those of Madeira and the Amazon River. As the region was very poor, even having acquired only a new miotera I left from there on the 18th, after being treated in the most distinct way by the local Spanish mentioned above during my stay¹¹⁰, we arrived in Marabitanas on the 20th with the break of the night. The river water was going down rapidly, so that above Marabitanas many shoals made it difficult to travel.

¹⁰⁶ of certain seasons added on the line

¹⁰⁷ And a... church added on the line

¹⁰⁸ it follows at maximum frequency,

~~considerably~~ crossed out

¹⁰⁹ Post office added on the line

¹¹⁰ during my stay added on the line

Gloves for ant proof

Sateré-Mawé, Lower Amazon, Brazil,
circa 1830. Palm leaves, vegetable fiber,
dye, length 135 cm.

Natterer Collection.

The ants proof symbolizes the sexual encounter with the snake Woman: physical pain makes perceptible the social dilemma of a marriage between potentially enemy clans. The two round specimens of gloves from the Natterer's collection form a male-female couple. They distinguish themselves – something that only the expert can see – in the technique of tracing. (WK)

Weltmuseum Wien





Narcotic Inhale artboards.
Sateré-Mawé, Lower Amazon, Brazil,
circa 1830. Wood, pigment, max.

length 26.5 cm.

Natterer Collection.

The carved inhaling artboards represent a high point in the art of Sateré-Mawé, an art however, that completely disappeared in the 20th century. Often the cable of these objects is shaped like a serpent. The Great Serpent moi ok prevails over the rainy season, a time when the danger of falling ill is higher and therefore, requires the most intensive use of shamanic power. The decoration of the other clipboard, made of flowers, butterflies and dragonflies copulating, is, with its imagetic programming, in relation to complementarity with the clipboard that presents the figure of the serpent. The game among insects connotes the warm and sunny season of drought, in which humans leave behind their continuing hostilities within the tribal community and "Bloom" in the small family union in their plantations scattered in the forest. The iconography of the narcotic inhaling tablets shows the strong contextual insertion of the ritual consumption of drugs in the annual seasons cycle. (WK)

Weltmuseum Wien

Barcellos, August 22, 1831

Works that arrived in the meantime and were not postponed were the reason why I could not finish this letter in time to send it by military mail, which departs from Marabitanas to Barra do Rio Negro every 6 months. I am now enjoying my stay right here, prompted by the necessary caulking of my boat, so I'll be able to inform [Your] E[minence] of my travels since then as soon as possible, but especially to inform about the objects with which I increased the collections for [the] i[mperial] museum. I am going to start with the collections, because I am convinced that this subject is of particular interest to Y[our] E[minence], whom I particularly appreciate the expansion and beautification of the i[mperial] museum, and not least the discovery of new undescribed animal species.

Mammals are in smaller amount, only 10 species,¹¹¹ 3 species of the simia genus, and among them, still in doubt whether Cocuy's *ateles*¹¹² I am convinced that *s[imia] seniculus* and *beelzebul* are just varieties.¹¹³ They form races limited to certain places. Often they are red on one side of the river, on the opposite side are black. Near Borba the males and females are black, in Matogrosso and by the Paraguay River only males are black, females and male infants are olive, tending also to yellowish. Next to the Negro River both sexes are straw yellow, and also golden yellow, with bright red ends. In the province of Sao Paulo both sexes have the same reddish-brown color. *Bradypus didactylus*, *vivra caudirolanta*, *sicurus* 1, *loncheris* 1, *mus* 2, *oxyrhinus* 1. There are 73 species of birds, several dubious species not counted for impossibility of comparison;¹¹⁴ as *falco* 1, *corvus* 2 species, one of them *corvus calvus*, *oriolus* 1, *turdus* 1, *myothera* 14, *rhamnophilus* 6, *ampelius* 2, one of which amp [elius] *cotinga* and *carunculata*, *pipra* 4 [species], *muscicapa* 9, *sylvia* 2, *troglodytus* 1, *tanagra* 4, *rhamphastos* 2, *trogon* 2, *bucco* 3, *psitt[accus]* 4, *picus* 1, *dendrocaleps* 1, *anabates* 1, *trochilus* 7, including *latipennis*, *cherry* 1, *crax* 3, *gallinula* 1.

Amphibians there are 31 species, as of *testudo* 5 species, all river turtles, among which one large species with a very large head, so called *cabeçudo* (bighorn), *stellio* 1 species, *lacerta* 1, *croc[odilus]* 2, smooth-fronted caiman and *jacaretingua* (spectacled caiman), one crocodile similar to *croc[odilus] sclerops*, but distinct, with long, narrow head, tail much longer than in the Matogrosso *jacaretinga*, and not so strongly curved upwards. The specimen is 5 feet and 3 inches long and is completely stuffed. With this one now there are 5 distinct crocodile species that live in Brazil, and perhaps that *Taguahy* river *sclerops* might be distinct from that of the Matogrosso, which I cannot determine by comparison. In the Matogrosso *jacaré guaçu* and in the two species above I found the musk deposit on the sides of the neck, and I am convinced that all caimans have it; however, as these deposits are smaller¹¹⁵ than those near the anus, they could easily go unnoticed. Dry, grated, or pulverized male caiman's genitalia is often used in Brazil for nerve attacks, cramps, etc. The musk of this animal must have effects of different intensities, because in my opinion¹¹⁶ the penis would receive its efficiency from the musk containers next to it.

111 only 10 species added on the line

112 Cocuy's added on the line

113 it follows because there are

transitions, crossed out

114 several... comparison added on the line

115 these deposits added on the line

116 in my opinion added on the line

From the hyla 4 species, rana 1, bufo 1, colubes 15 species, boa 1 with a beautiful ring-shaped design on the back.

Of fish there are 15 species, salmo 5, cichla 4, silurus 2, cataphractus 3, hirnarchus 1.

Of intestinal worms a considerable amount.

The constant rainy weather, because only in February there were a few days without rain; the river that rises from March to the end of June, which extensively floods all the islands, with few exceptions, and even many low shores; such were the reasons why the performance on this river was not as numerous as I certainly wished, and all my hope now turns to the Branco River, for the regions around Fort São Joaquim are mostly steppes where one could find lots of new bird or other rare animals. According to my original plan I should have started my trip there much earlier; but I was advised not to do so because that river flows away and floods its shallow banks so that one can often be there for days without finding a bit of dry ground to make fire; and because it has a strong current when the water level is high, which makes the journey go very slowly, because only rarely can oars be used. For this reason I stayed longer in *Marabitanas*, and also because the pickups at the support base are much more productive than during the trip; I decided to travel some nearby rivers.

On May 26 I left *Marabitanas* and arrived the next day in São Marcelino, near the *Xié* River outlet. Next to a nearby waterfall is located a village called *Commati* inhabited by *Uerequennas*; That's why I wanted to go there and visit it. Because of the strong rapids of the creek, which was not even so wide, I only reached the waterfall on June 2. The village consists of 5 palm-walled huts, only one hut had earthen or mud walls. The locals are *Barés* or *Uerequennas*, fled from Spanish possessions, and somewhat already civilized, and they speak a little Spanish. A 2-day trip from there¹¹⁷ up the river follows an overland path to São Carlos, which should be 2 [short] days away. The direction of *Xié* River on the Arrowsmith's map looks incorrect, for on the map the main direction to the waterfall comes from the north, northwest, and northeast. [Because of] the constant rainy weather I could only get 3 species of birds and 3 specimens of the great sloth, which stay hanging by day very quietly clinging in a hug over tall trees, looking like tree termites. On the way back it only took me 2 days to Saint Marcellin. On the morning of the 8th I reached *Nossa Senhora da Guia*, where I completed my crew to cross the *Içanna* River. On the afternoon of the 9th I entered this river, which is much wider than the *Xié* and had a much stronger current, so that only on the 22nd I reached the remarkable *Tunuhy* Waterfall, formed by the western slope of the long *Tunuhy* mountains, it is not exactly high,¹¹⁸ which extends towards the northeast and is covered with forest. This cliff and the rocks that cross the river, as well as the mountain immediately nearby, are composed of very fine-grained white sandstone. On this slope or promontory, whose coasts form a plain, was until a few years ago a small village inhabited by *Banivas*, now they are scattered. I sent my pilot to another village, at the *Cuiari*'s Rivermouth, a day trip away from *Tunuhy*. He went there with some iron utensils and glass beads to exchange for some weapons and other local Indian goods. I sent the *cacique*(chief) of the place a large knife as a gift and an invitation to go to *Tunuhy*. He apologized for not coming,¹¹⁹ for he did not understand Portuguese, and returned the gift to me with a black rooster. The pilot obtained by negotiation some bows and blowpipes and two baskets of flour.

117 from there added on the line

118 not exactly high added on the line

119 Would know how to talk, crossed out

On the 25th I climbed the next high mountain and enjoyed a beautiful and distant view. From the northeast to the south there were several isolated mountain ranges, protruding in the strangest forms of the forested surface; from south to northwest no mountain, just a plain to lose sight of covered with thick forest. The Içana River comes from the north-northwest, crosses the western bank of the mountain and turns southwards below the waterfall, and runs a good stretch continuing to run in the same direction.

On the 26th I left that place, and on the way, I visited the 4 villages of *Banivas* again. In one of them they organized a dance in their own way, where all the dancers simultaneously blew always the same sounds on a large and long horn¹²⁰ handcrafted with a tar-covered braid.¹²¹ Two of the dancers still had a cord around their ankles, in which held a large number of halves of hard seed capsules that rattled heavily like the *bororos* deer claws. I poured them *aguardente* and bought their musical instruments, as well as some blowpipes, nets, bows and arrows, and arrow poison and some feather headdresses, and so on. The arrows of this nation, like that of the Vaupés, they have no tail and always have very poisonous tips.

The *Içanna* River, in the language is called *Baniva Ennearí*,¹²² which has the same brown water as the *Xié* and *Vaupé* rivers,¹²³ when it is low it shows many rocks and even two waterfalls until next to *Tunuhy*, which were then under water. At one day's journey above the mouth is located along the right bank the mouth of the important *Bootos* river [sic], *Amanari* in the *Baniva* language; it is not on the map, neither is the *Combate* River, smaller than that and on the same side, near the mouth of *Içanna*. It is located from a 3-day trip up the *Cuiari* River on the right-hand side¹²⁴ of the mouth of the *Aiarí* River, from which sources a short overland path leads to the *Kerarí* River, which above the *Pacu*, falls into a waterfall on the *Vaupé* River. Both mentioned rivers are inhabited by wild *Banivas*. A little farther up, near the source of *Içanna*, a path heads toward the *Papunauvá* River, where they seek sarsaparilla. The river flows into the Orinoco according to the Indians, but it can be on the upper Negro River. The high regions of *Içanna* are inhabited by *Boauvatanas*, *Camacunás* and *Baichoarianas*, which appear to be *Baniva* branches, as the language of the former differs little from *Baniva*. On the 29th I arrived again at *Nossa Senhora da Guia*. It had once been prosperous; but now it has 12 houses and 1 church, but 10 new houses are emerging. The inhabitants are descendants of *Banivas*. On the 10th I stayed overnight in *São Felipe*. On July 1, I stopped at Santa Anna for breakfast, and at noon I reached the mouth north of *Vaupé*, and in the afternoon I reached *São Joaquim*, on the right bank of the *Vaupé* River, on top of a small elevation, just above the region where the river is divided into two parts by a large island. *São Joaquim* consists of 7 houses, only 2 still inhabited by the remains of the *Coiohana* nation. I brought a guide here, for none of my men had ever crossed the river, and my departure was before the break of July 2. On the 4th I reached some houses along the left bank inhabited by *Tarian* Indians. The landowner is a civilized Indian and speaks Portuguese. On the 8th I reached 2 houses or huts on the left bank inhabited by *Toccanas*; they were very suspicious and only sold a basket of flour. On the afternoon of the 9th, we passed the mouth of the *Tiquié* River, which seemed to come from the southwest and must be inhabited by the *Macu*, *Macuná* and *Mehóana* nations. On the 10th, there was still a lot of foam from the *Panoré* waterfall, which should still be a good day trip away. On the 11th we passed again some huts inhabited by *Toccanas*. With them I negotiated the purchase of a spear, gourds, baskets and bananas. At night, as we always spent in the woods, we distinctly heard the dull rattling of the distant waterfall.¹²⁵

¹²⁰ it follows a bit like a speaker tube,
crossed out

¹²¹ tar-covered braid added on the line
¹²² in... *Ennearí* added at the bottom
of the page

¹²³ Which has... *Vaupé* added on the line

¹²⁴ on the right-hand side added on
the line

¹²⁵ it follows nearby

On the 11th I docked in São Jerônimo, where on a small elevation were still 3 huts of the once important village. The few inhabitants are Tarianas and Tocannas, the rest moved higher to escape the many oppressions of the São Gabriel's commander. The Panoré waterfall is another 1/2 hour ahead. The river, which is quite large, is led by a channel of 200 paces wide and occasionally 800 feet long under a frightening turbulence caused by reddish granite rocks. On the south side there is a small canal with a waterfall, which has yet to be completely emptied,¹²⁶ isolated from the big canal by a rocky island. Above the big waterfall, named Paiolé panné in the Tarian language, the river is wide, and just under fifteen minutes away is another even wider waterfall, already forming a fall, called Toinanamé; and further northwest¹²⁷ a slightly smaller one formed by another branch of the river. In this region the entire river must be covered with many rounded rocks, they are visible when the water level is low. Large canoes are pulled here to the mainland. Another waterfall called Jaguareté is 2-day away from there, and it's called Jauhi panné in the Tarian language. From there to the Kuduari River, coming from the Içanna region, there are 27 large or small waterfalls. The biggest one of these is Carurú (Ibhipanné). Still going higher, beyond the mouth of the river Cuduiari, there is a great fall named Juru parí (the devil's fall). Not too far away from there it might be where the steppes begin.

The Vaupé River and the streams and brooks that end up in it are inhabited by many nations, to which the Portuguese call them Vaupé. I wrote down linguistic samples from the Tariana, *Tocanna*, *Dessanna*, *Kobéu*, *Arapáru*, *Pirá* and *Coihoana* nations; and I considered that Tariana descends from *Baniva*, and that the other languages have many things in common with one another; and that one day distinct tribes might have simply formed a single nation. From the nations *Uanana*, *Xilia*, *Tejuca*, *Carapana*, *Tatu*, *Uaiana*, *Jurupari* and *Bahuno* I could not write down any words, as they inhabit distant regions in the upper part of the river. At my invitation several savages came from the *Jaguareté* [waterfall] to exchange their weapons, small baskets, stools, and enameled gourds and exclusively crafted, etc. They walk completely naked, and only men hide their private parts with a narrow strip of bark. Only during their dances women tie a small apron less wider than a hand at the waist, and [crafted] artistically with small beads, to which they give great value and only negotiate them when the gain is really high. The women's hair maximum length¹²⁸ is below the shoulders and backwards from the forehead. Men carry an artfully crafted comb in their hair.¹²⁹ Both sexes have tightly fixed bandages under their knees since childhood to keep their calves thick, they say. Men, especially the *Tocannas* and *Desannas*, carry a rough quartz cylinder, approximately 4 inches long and 1 inch in diameter, pierced at one end, tied in a cord around the neck in a way that the stone hangs length wisely over the chest. The caciques pierce these stones longitudinally and carry them across their chests. They might work months on these stones, especially on piercing, and it is their greatest ornament, to which they give great value. On the cord there are also some shiny black seeds lined up like shells. I could not get a stone from the cacique. I obtained it by negotiating a kind of crown, perhaps made of macaw feathers, that they tie around the head, as well as other feather ornaments, combs, monkey hair strings, bows, arrows, specially crafted cacique's spears with poisoned pointed heads. They were made with artfulness diligence, a very especially beautiful feathered staff, made of copper-leaf earrings, jaguar-toothed belts, jaguar-bone flutes, and more. These savages plant manioc, from it they extract the starch from which they make great pies that dry in the oven. These pies are called *beijú* and are the main food of savages, who are excellent fishermen and they use [small] nets. They also eat game, but not snakes, like their *Banivas* neighbors. A favorite meal there is roasted worms, specifically a species found among the leaves of several parasitic pineapple species, among which rainwater accumulated. Some trustworthy people in Matogrosso assured me that fish were found in the accumulated waters of large pineapples on tall trees, *tejum*, a kind of synodus. How could they have ended up there?¹³⁰

¹²⁶ which ... emptied added on the line

¹²⁷ improved from further southeast

¹²⁸ maximum length added on the line

¹²⁹ Men... hair added at the bottom

of the page

[Due to] the bad weather that was still going on I could only get in that region 3 new *myohera*, a *pipra*, and a *corvus calvus*¹³¹. On July 24, I arrived again in São Joaquim, where I had my covering or rooftop repaired, and sent a canoe to São Gabriel to bring an experienced pilot with some Indians.¹³² On the 28th the people arrived and on the 29th I left São Joaquim and arrived with no problems in São Gabriel. I stayed there until August 3 to receive linguistic samples from the following Indian tribes: *Meppuris*, *Macunás*, Northern *Macus*, and *Teia* River's *Macús*.¹³³ That day I left from there, and in 2 hours I got in *Cammanau* passing smoothly through all the dangerous passages and waterfalls where, nevertheless, the strong surf hit on the ship and wet some things. Since I had decided to climb the high *Uariú* mountain range, I entered the *Curicuriari* River to reach the property of a certain Adrião da Sylva Meneses, from where the mountains should have been nearby. This man – the only one here who could serve as a guide – was sick and could not accompany me, but he sent me a *Macu* savage who might know the region. So, I traveled for a day upstream of the *Curicuriari* River, and headed to a deep brook near the *Kalibua*,¹³⁴ which comes from the south and must spring in the mountains.

On August 5 and 6, I sent my crew led by the *Macú* to clear a path through the forest to the mountains and find out about a passage where it seemed feasible to climb the most possible moderate-sized mountain. Every two days they returned at night after unsuccessful efforts to find a way toward the woody mountain. Both times they climbed the nearby low mountains, for even the guide himself had never been to the mountains. On the 7th I left with 7 Indians and a Negro to see if I would have more luck, and so I ordered provisions for 2 days. After 3 hours of marching through the forest and 8 passes through a stream I reached the foot of the mountain. The high forest covered its view, only occasionally one could glimpse huge rock walls, shrouded in mist at the top of the mountain. I told an Indian to climb a tall tree for a better view of the area; and I marched farther south by the foot of the mountain and followed a small creek that comes from the gorge of the mountain. After a few hours of tiresome climbing over loose granite blocks, we arrived near its fountain, that is, a crevice formed by 2 vertical rock walls at the foot of it; but only way up we reached another south-facing wall. It seemed to belong to another mountain, the one I believed to be the highest. I then ordered them to make their way up between the two walls. After 6 hours of an extremely tiring and dangerous climb, often grasped with both hands on vines or tree roots, often going through chasms on all sides, drenched by the rain that has fallen several times, with uncovered body parts burning by painful stings from small ants,¹³⁵ that swarmed,¹³⁶ I got on the narrow mountain slopes extremely tired. It stretched from north to south and was also covered by a very tall forest; and the singing of a cock-of-the-rock. The sun had already set. Soon we find an opening formed by a granite shaft hanging horizontally where we could spend the night sheltered from the rain; but the water ran out, which was found half an hour later. We dried and warmed ourselves by a large fire, and consumed the little we had brought with us. The Indians slept on palm leaves between several campfires, and I slept in a crevice raised just under six feet, where I also had a fire lit. Its walls were entirely covered with termites' pathways, which at night devoured my hunting bag. The sunrise on day 8 seemed to promise a clouded day, and we left southward. Then the path soon turned uphill, and the forest grew thinner, and the rocks more numerous, often covered only by long, sharp grass, and shrubbery, which in many places allowed a vision of terrible abysses and reminded of the dangers of the way. After 2 hours of incessant climbing we again reached

¹³⁰ These savages... they have ended up there? added at the bottom of the page and in the beginning of the next

¹³¹ And a ... *calvus* added on the line

¹³² with some Indians acrescentado no início da linha seguinte

¹³³ Northern... *Macús* added on the line

¹³⁴ near the *Kalibua* added on the line

¹³⁵ it follows that were going there in large colonies everywhere, crossed out

¹³⁶ that swarmed added on the line

a high forest, and gradually the surface became flat. We had reached the highest elevation, a small boulder covered with forest. Since the ends of the two highest mountains were bare and without trees, I realized¹³⁷ that we had not climbed the correct mountain. I told them to fell trees around in the 3 directions, southeast, south and west, to obtain a panoramic view. To the east and southwest, just in front of it, separated only by a deep and terrifying valley, were the two highest mountains, immensely scaled rock masses, only here and there covered in a few vertical stretches with small shrubs, which ridges were sometimes surrounded by clouds and sometimes they peered freely. To the south-southeast was the scaled *Jupauü*, like a sugarloaf, a little out of reach and isolated from the high mountains. For a long time, I stayed sat and concentrated in deep thought, watching the spectacle of the clouds. Involuntarily stirred in me, penetrated by a sacred fear, various ideas within me about the origin of these immense masses of rock. Their figure, apart from that of the naked *Cocuy* and all the granite masses emerging by day along the banks of the Negro River, seems to me to clearly prove that they were once liquid, and that perhaps most of which make up the core of the earth.

The weather was bad, only rarely did the sun come up, many clouds moving from south to west until north, floating over the endless forested surface. To the north-northwest lay the *Bitipanni* Mountain and a large stretch of the Negro River, and a little further north was San Gabriel with the nearby mountain. The furthest mountains were covered with fog. I waited several hours for the weather to clear up, but in vain since thick rain clouds soon covered the whole landscape, and heavy rain fell on the canyon. The complete shortage of water on top of the mountain ridge did not allow to spend the night there to wait for the weather to get better. And the provisions, made up only flour and a few bananas, were not enough for us to look for yet another way to the two highest mountains. The very region itself did not seem to promise anything new to zoology, for apart from a few cock-of-the-rock, few birds could be seen. Only the sad sounds of a curassow echoed from the gorge to us. So, I decided to take the way back. Downhill descent was in many places much more dangerous than uphill, though it was generally faster; the way was already open¹³⁸, and I arrived at the ship late at night under the torchlight and extremely tired, because I did not want to stay overnight in the swampy forest. The following morning it rained, and I departed from there. By noon the weather was clear, and I had already reached the mouth of the *Curicuriari*. The forest by the bank covered the mountains view. Therefore, I ordered them to row near the left bank of the Negro River, from where the mountain range appeared very clear. It seemed to me it was made of five separate mountains, not to mention the cylindrical mountain to the south and hidden by the others. One could clearly see the mountain I had climbed, and I estimate it to be about 3/4 the size of the two nearby ones. A storm that broke out later forced us to stay overnight on an island, in a way that I only arrived in São Pedro the next morning, August 10th. There I recorded samples of the *Ihini Baré*'s language, distinct from the *Arihini Baré* - two different *Baré* tribes (*Bale*), of which the *Baiaré Pitanna* tribe is a branch. On the afternoon of the 11th I passed near the mouth of the *Marié* River, which comes from the southwest and is almost as wide as the *Içanna*, and it has the dark water of the Negro River. The region where it runs must be rich in *piaçava* palm trees, a curious palm tree whose trunk is entirely covered with long and coarse hair with which ropes are made. I stayed overnight in São José, where I wrote down *Macus*' samples that inhabit the *Teia* River.

137 it follows my mistake, crossed out
138 The way... open added on the line

On the 12th I spent the night at the *Cabury* River's mouth, on which on the 13th I drove to the vicinity of the waterfall where once *Nossa Senhora das Caldas* was, of which there were only very few houses left. There was a military post with 2 soldiers there. This river also has brown water; only the *Marauiá* river has transparent water.

On the 14th, I stayed overnight in Boa Vista on the right bank, the remains of an old village, almost in front of *Castanheiros*, but far below.¹³⁹ A small church and 2 houses are still standing, but without residents. They were in their plantations. On the 15th I spent the night in *Santa Izabel*, and on the 16th at Mr. Julio's. From the 17th to the 20th I also took advantage of the nights to get here faster, because my boat made a lot of water and urgently needed caulking.

Only a little while ago, on July 28,¹⁴⁰ I received in São Joaquim a writing dated October 18, 1830¹⁴¹ from I.R. [Austrian] Chargé d'affaires, Baron von Daiser, from whom I received news about an open credit in Pará at "Ingles, Eyton & Co" and notified me of Baron von Mareschal's departure. I answered the letter here.¹⁴²

When I was still in *Marabitanas* I received a letter from Pará of Mr. John Hesketh, dated September 16, 1830, in which he informs me of the successful arrival of my two shipments from *Borba*. The remainder consisted of 7 boxes, which left for London with a brig called *Regatta*. From the various letters written by this occasion to B[aron] Rothschild I have so far received no reply, the same way the 2 letters from *Borba* addressed to Y[our] E[minence]. The news in a Pará's newspaper of a trip by B[aron] Rothschild to Constantinople made me a little concerned, and I wrote to the I.R. Ambassador in London informing him of my shipments. Although I had addressed the president of this province by my own hand, I could not prevent Pará's customs officers from opening two boxes. With great expectation I await the news of their smooth arrival in Vienna, and the same uncertainty disturbs me when the shipment sent from *Cuyabá*; and I am eager to know if to some extent I have met the expectations of Your Majesty the Emperor, and if I have succeeded in satisfying Y[our] E[minence]. I ask Y[our] E[minence] to put me standing with all submission to Y[our] M[ajesty]'s feet, may the heavens still preserve him for a long time, and that you recommend me his lofty grace. Receive Y[our] E[minence] the sincere assurance of my absolute esteem with which I have the honor of being...

Adornment of legs for the occiput.
Bororo da Campanha (Biriboconné),
Paraguay River, Mato Grosso, Brazil, circa
1825. Parrot and Hawk feathers, cotton,
vegetable fibers, resin, h. 36cm.

Natterer Collection.

Adornments similar to that (*Kiogoáro bóe el-aobáru*) were found among the Bororo of the São Lourenço River. They were used near the occiput, both by men and women, in a way that the feathers fell on the back. The size and type of feathers used were the determining marks for the differentiation between the clans. (CF)

Weltmuseum Wien

¹³⁹ Almost... below added on the line

¹⁴⁰ on July 28 added on the line

¹⁴¹ Dated... 1830 added on the line

¹⁴² Only... here added at the bottom
of the page



189
Casa da Moeda
Banco do Brasil
M. 1899
J. 1899

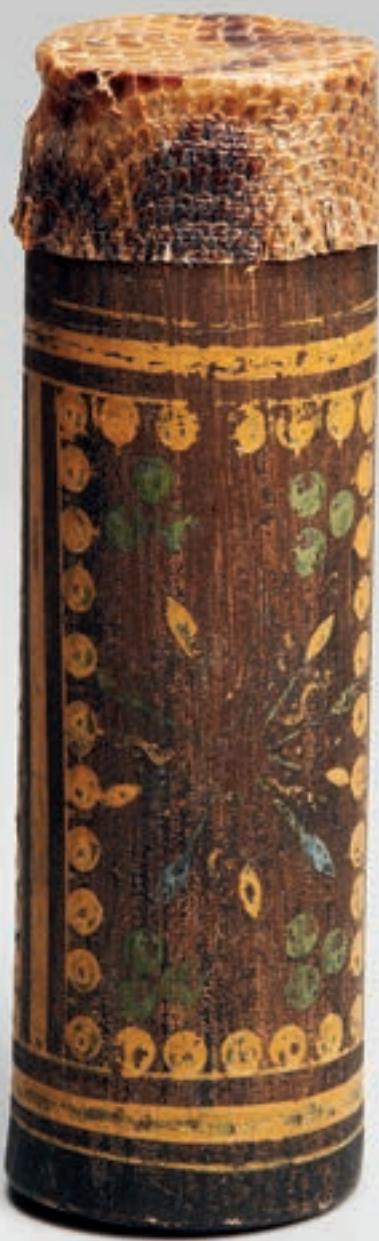


JOHANN BAPTIST NATTERER
Side view of a striped headstander,
Anostomus taeniatus
(Characiformes, Anostomiae).
Judging by the date, this is a collected
sample in Vila Bela do Mato Grosso.
(Pelzeln test, 1871), female.
August 12, 1828.
NHMW

JOHANN BAPTIST NATTERER
Side view of a Red-tailed Freshwater
Barracuda,
Acestrorhynchus falcatus
(Characiformes, Characidae)
Male.
Caissara, April 22, 1828.
NHMW

JOHANN BAPTIST NATTERER
Side view of a manguruiú
(Giant Jello Catfish)
Pseudopimelodus zungaro
(Siluriformes, Pimelodidae).
[No] 17, *Silurus*.
Cuiabá February 6, 1824,
Magwee.
NHMW





Cartridge of Wicks, *Manaós*.
Negro River, northwest of the Amazon, Brazil,
circa 1831. Wood (painted), snakeskin,
h. 16.5 cm.
Natterer Collection.
The wicks cartridge recalls in its form, the
quivers for the blowpipe arrows. The *décor*
reflects European influences, however. The
Manaó were almost completely integrated
with the urban population along the Negro
River at Natterers time, but apparently there
were still other groups living along the rivers
by its spring. Nowadays the *Manaós*, for all
we know, have definitely disappeared from
Brazil. (CA)
Weltmuseum Wien

Gloves for ant proof.
Sateré-Mawé, Low Amazon, Brazil,
circa 1830. Palm leaf, vegetable fiber,
dye, max. length 60 cm.
Natterer Collection.
The Rituals of the Amazonian Indians
concentrate a variety of significant
marks that rise, all of them at the
same point: in an experience of pain
that shakes body and spirit, the boys
of the Sateré-Mawé are Introduced
into the Society of adult Men's
clans, prepared for a life as warriors,
hunters and spouses, and immunized
against diseases and iniquities. They
are "vaccinated" with the venom of
the "tucandeira" Ants, which bites
they are obliged to endure during the
festive dances. The ants are inside
the "gloves" braided, which aesthetic
treatment allude to the mythical origin
of the feast: in the past, the armadillo
went to fetch the ants from the world
of the inlets, removing them from
the seductive snake woman. (WK)
Weltmuseum Wien

Club, War and prestige.
Pauxiana, Wapixana. Guianas, Brazil/
Guyana border region, circa 1830.
Wood, vegetable wool, dried toucan
skin parts, max. length 79, 5cm.
Natterer Collection.
The clubs were, in the Guianas, both
weapons of war and ceremonial objects.
In the battle man against man, they
were used as a weapon to strike; its
extremity, which was often in tip-
shaped, served to give the fatal blow to
the opponent. A wrap and a cotton strap
ensure firmness by holding your cable
amid the confusion of battle. Clubs with
decorative cranny and pendants of parts
of bird skins were reserved for leading
personalities, who presented them as
prestigious objects in assemblies and
parties. (CA)
Weltmuseum Wien





Spears

Parintintin, Tapajós River, Brazil, circa 1830. Wood, bamboo, feathers, cotton, max. length 153.5 cm.

Natterer Collection.

These spears would have come from the Parintintin who lived south of the Munduruku. However, "Parintintin" is also a Munduruku's generic term for many divided groups of the Tupi-Guarani language, between the Tapajós and the Madeira, which are summarized as Kagwahiv. Many of these groups, still mentioned in the 19th century, disappeared, or adapted themselves to the caboclo population of the Amazon or they still live – surprisingly – hidden in the forest. (WK)

Weltmuseum Wien

Ritual objects.

Sateré-Mawé, Lower Amazon, Brazil, circa 1830. Wood, deer bones, hairs of anteater-flag, bamboo, string, pigment, max. length 33 cm.

Natterer Collection.

The shaman of Sateré-Mawé counted with auxiliary spirits from different cosmological domains to his side to help him in his work. The ritual objects presented here and the flute served to invoke specific spiritual characters. Of the animal materials used one could deduce the spiritual characters: the adornment of feathers, for example, allude to the toucan. It likes to eat fruit of the palm-*açaí*, swallowing along its grains and then vomit them. As a spiritual character it dominates, thus, it is the same technique as a shaman acting in the cure of a disease, since he also sucks the disease causing the illness out of the patient's body and then – what is visible to everyone – and it makes him vomit. (WK)

Weltmuseum Wien

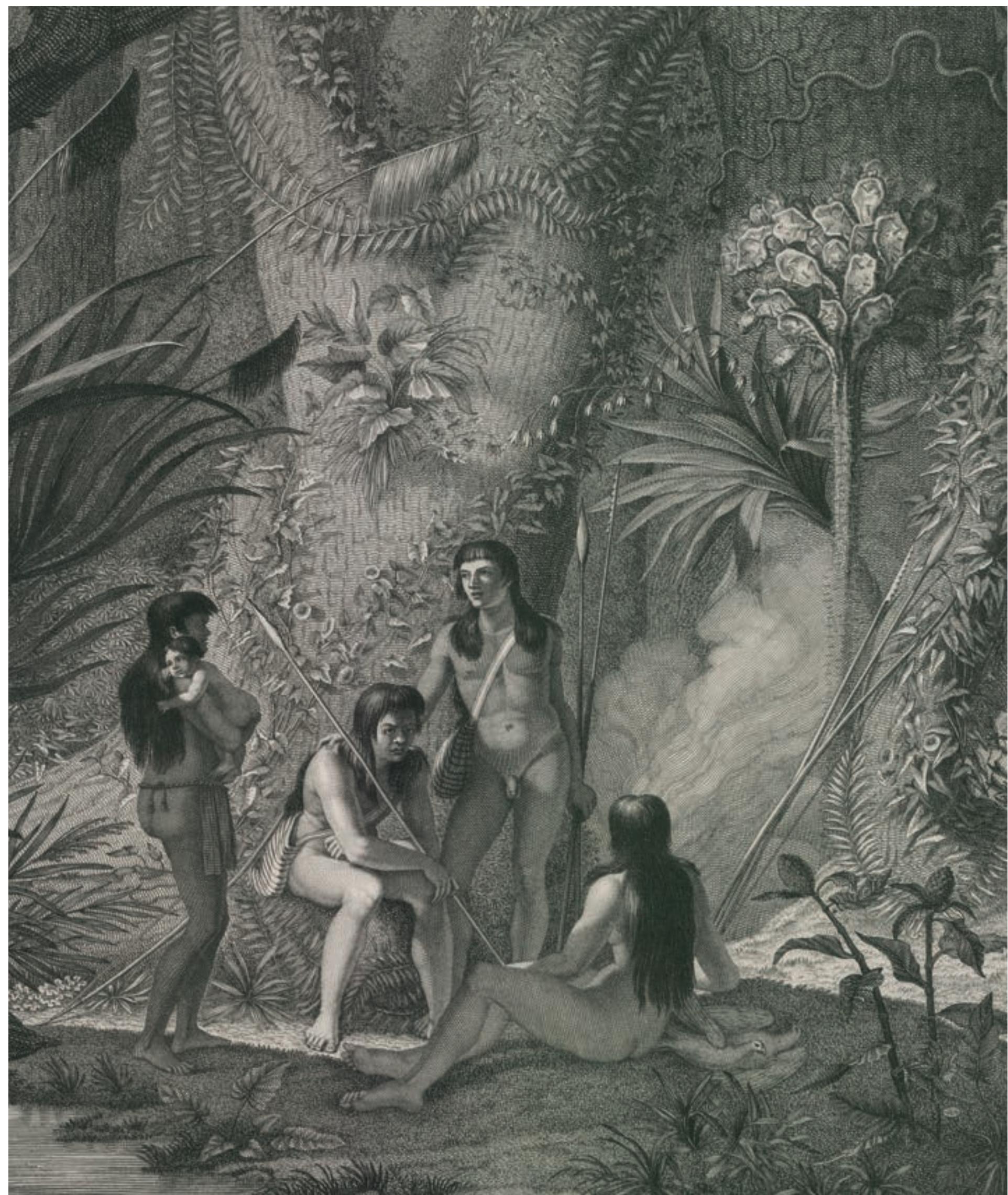


Austrian Naturalists in Brazil

Christa Riedl-Dorn

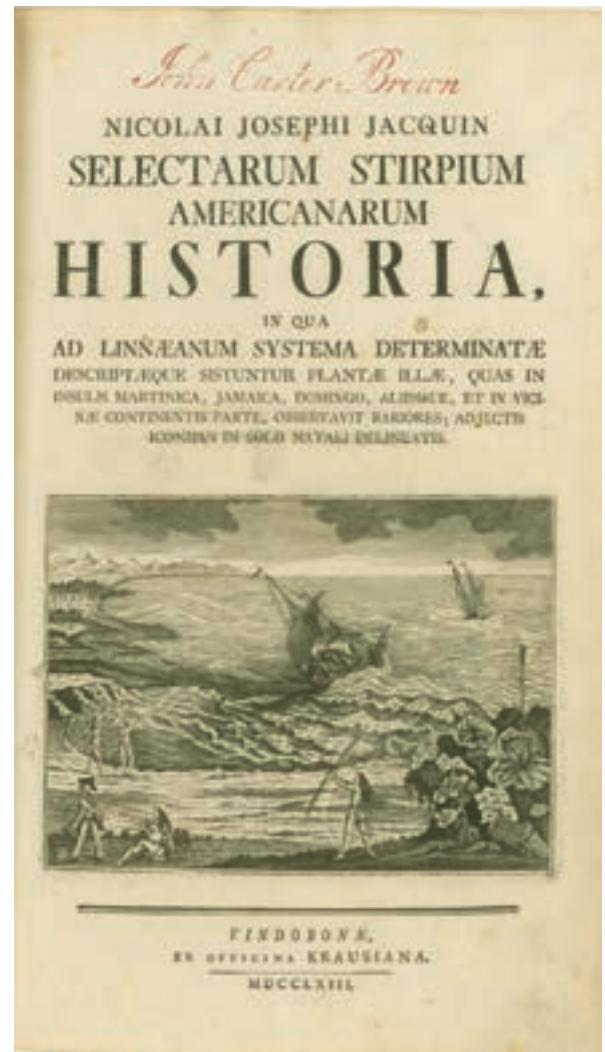
MAXIMILIAN ZU WIED-NEUWIED
Group of Camacan indians in the forest.
Engraving by Jacob Lips, from a
watercolour by Maximilian zu
Wied-Neuwied. From *Travels to Brazil*
in the Years 1815 to 1817. Copperplate
engraving, Zurich, 1820/21
NHMW





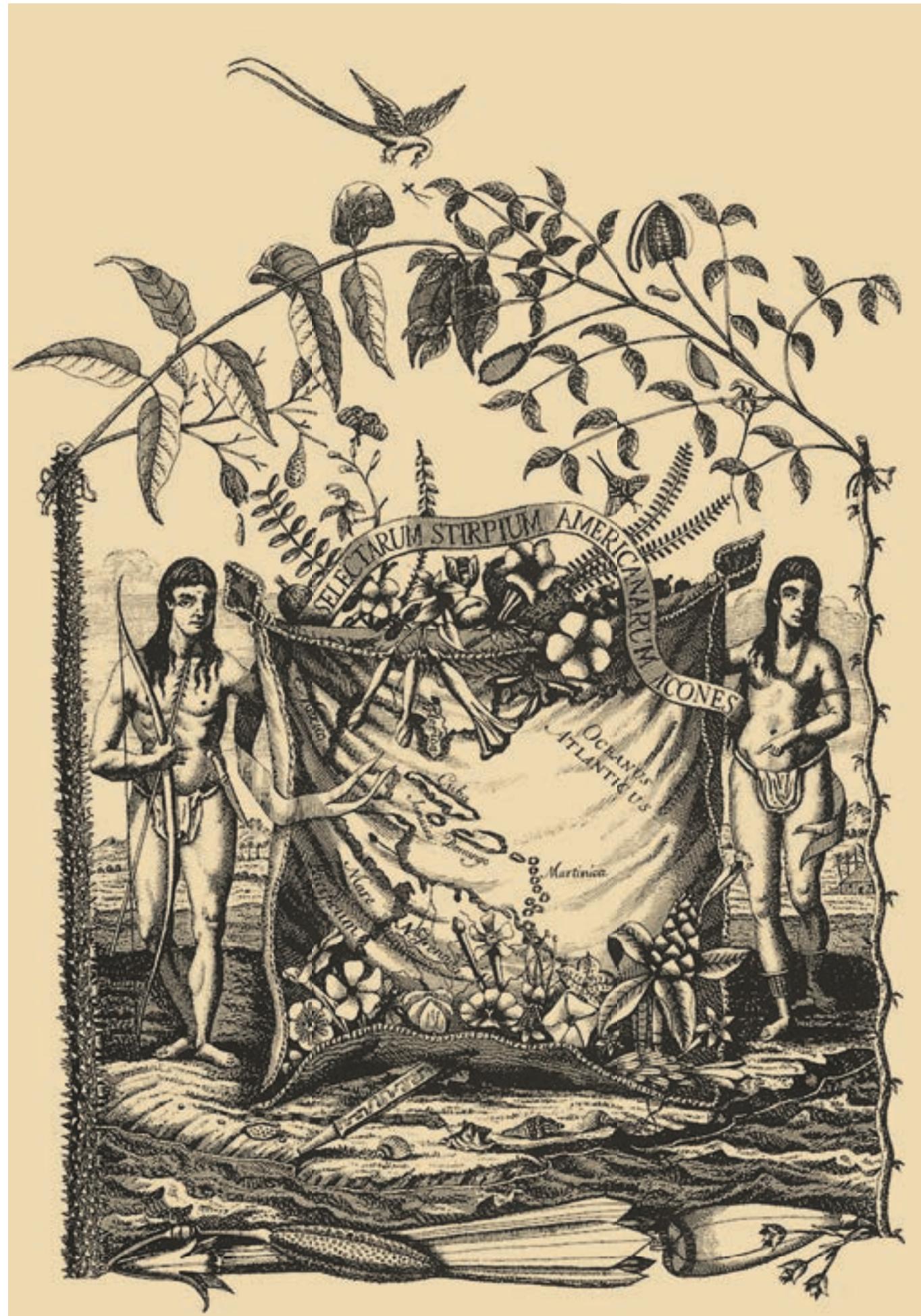
The marriage of the Archduchess Leopoldina to the heir to the throne of Portugal, Brazil and the Algarves was principally determined by political and personal considerations relating to the planned expedition. In 1815, Brazil was elevated to the status of United Kingdom of Portugal, Brazil and the Algarves, thus constituting the only monarchy in South America. This close bond must be understood in the context of events which took place during the Napoleonic Wars. In late 1807, the entire Portuguese court moved to Brazil. Portugal was occupied by the French, but then the country was left to its own devices and came under the influence of Great Britain's liberal ideology. Following the treaties of the Congress of Vienna, Portugal was included in the Metternich System of alliances. John VI of Portugal was interested in greater ties between the Habsburg and Bragança royal families, which he imagined would bring greater security in relation to Great Britain. Chancellor Metternich himself saw the possibility of strengthening his influence in Portugal and the New World, and like him, Emperor Francis I also wished to restore "order" to Portugal and put an end to liberalization; however, he only agreed to his daughter's marriage once he was sure the Portuguese royal household would return home to Lisbon.

The marriage took place by proxy on 13th May 1817 in the Augustinian Church in Vienna, the groom being represented by the Archduke Charles. As well as political and economic aspects, Francis (I of Austria and II of the Austrian-Hungarian Empire) nurtured a great personal and scientific interest in the expedition, which therefore suffered no limitations of time or resources. Planning began in 1816. General coordination was given over to Chancellor Metternich and the scientific administration was given over to the director of the Imperial Natural History Cabinet (Vereinigte Naturalienkabinete), Karl von Schreibers. Fourteen scientists and artists took part in the undertaking. Part of the marriage contract was a commercial accord. Austria, having no colonies, wanted to take part in transatlantic trade and was looking for new markets and resources. The ships carried Austrian merchandise such as mercury, steel, mirrors, arms, among others. The aim was to test which of these might be supplied to Brazil. The scientists were also charged with producing reports about merchandise, routes and geography, as well as the young country's political and economic ambitions.



NIKOLAUS JOSEPH FREIHERR
VON JACQUIN
Selectarum Stirpium Americanarum, Historia
Title page, 1763 (c)
NHMW

NIKOLAUS JOSEPH FREIHERR
VON JACQUIN
Selectarum Stirpium Americanarum, Historia
Title page of the book's plates
of drawings, 1763 (ca.)
NHMW



Austria and Brazil

The relationship between Austria¹ and Brazil dates back to the 17th century. The first Austrian researchers in the current territory of Brazil came from the ranks of Jesuits. The main goal of members of the Society of Jesus, founded in 1534, was the conversion of “heretics and pagans”. Evangelisation also included the introduction of so-called “Christian” values, among them monogamous marriage, how to dress, life in villages based on agriculture (so-called Missions) and the recognition of and submission to a Catholic monarch. As well as missionary work, the Jesuits devoted themselves to science, collaborating with geographic, ethnological and scientific research. Most of these priests’ activities were in the Upper and Middle Amazon and its respective tributaries.

Many Jesuits from the region of Austria worked at the so-called Maynas Mission, in the Upper Amazon (North Peru, South Colombia, Northwest Brazil). Father Samuel Fritz (1654-1725), who arrived in Cartagena in 1684, deserves special attention. Between 1689 and 1692 he travelled up the Amazon River from the village of Pará (now Belém) to the region of Lagunas, for political missionary reasons. Among other discoveries, he found that the Marañón River, in Peru, was identical to the Amazon River. The first precise map of the Amazon from source to mouth is attributed to him, printed in 1707 in Quito, in 1717 in Paris, and which for a long time served as the basis for guiding all expeditions in the Amazon region. In a publication about the map, Father Fritz also described the flora and fauna, as well as drafting a dictionary and grammar. It is supposed that he used notes by Fathers Johann Gastl (1650-1693) and Heinrich Wenzel Richter (1653-1696) to draw up his map. Father Johann Gastl must have supplied hydrographical observations and Father Richter, who worked in the Upper Ucayali region, a dictionary.

In the extreme south of Brazil, which at the time was still understood to be part of “Paraguay”, the versatile Anton Sepp von Rechegg (1655-1733) worked among the Guarani Indians for nearly 42 years. He was a master builder, surgeon, music teacher, organ builder and metallurgy specialist, having founded the first iron ore processing plants. His account of a 1686 journey became one of the most widely read books of its kind. From 1710, Father Sigismund Asperger (1687-1772) worked in the same region as a doctor and botanist. A book about medicinal plants based on recipes used by the Indians is attributed to him.

In 1854, with the death of Maria Anna, Queen Mother of Portugal and the Algarves, the expulsion of the Jesuits from Brazil began. She had protected the Jesuits and five years previously had expressed her wish for German-speaking priests. Now the religious order was accused, among other things, of wanting to form a “state within a state”, supporting the resistance of the Guarani Indians against the resettlement, from 1750 to 1755, of seven Missions. A 1759 decree by the Marquis of Pombal ordered the confiscation of Jesuit property and their expulsion to Portugal. In the colonies, Jesuits were arrested and shipped to Europe.

¹ Austria here refers to the area of Austrian Empire between 1804 and 1867.

After the expulsion, the missionary Franz Veigl (1723-1798), from the town of Graz, drafted the report *Gründliche Nachrichten über die Verfassung der Landschaft von Maynas, in Süd-Amerika, bis zum Jahre 1768* [Detailed information about the conditions of the region of Maynas, in South America, up to the Year 1768], which went into some depth about the world of the region's fauna and flora.

Father Rochus Hundertpfund (1709-1777), from the town of Bregenz, worked in the Lower Amazon region from 1740. In about 1750, he succeeded in crossing the dangerous rapids at Itamaracá, Pacisamba and Juruá, on the Xingu, a tributary of the Amazon, and brought back very precise descriptions of animals and plants and their use. Hundertpfund was expelled from Brazil in 1755.

To this day, the best-known Austrian Jesuit who worked in Latin America – more precisely, the region of the Abipón tribe, in Chaco – was Father Martin Dobrizhoffer (1717, Frymburk – 1791, Vienna). Up until the expulsion of the Jesuits from South America, he devoted himself first to the Mocobi tribe, then the Abipón, followed by the Guarani, then the Abipón again, concentrating on the language spoken by these tribes. He based himself on the work of missionary Joseph Brigniel (1699-1773), from Klagenfurt, who was the first to learn the language of the Guarani and Abipón. Dobrizhoffer's main work is a three-volume treatise on the history of the Abipón, drafted in Europe after his expulsion, following 18 years working in the Jesuit Mission covering Paraguay, Northern Argentina and Southern Brazil. Dobrizhoffer was taken on as a priest in the court of Empress Maria Theresa (1717-1780), Leopoldina's great-grandmother. In this post, he gave numerous talks about his South American journeys to enthusiastic audiences. He was a role model for many South American explorers and is considered one of the founders of the field of ethnology.

Over half a century was to pass, following the ventures of the Jesuit priests, before Austrian names would be mentioned again in the context of Brazilian exploration. In the meantime, Austrian expeditions did visit the Antilles and Venezuela.

The Austrian-Brazilian Expedition

The journeys of Alexander von Humboldt and Aimé Bonpland to South America from 1799 to 1804 attracted widespread interest in Europe. However, since they only had permission to visit Spanish colonies, they didn't travel to Brazil, something Humboldt always lamented.

Brazil was only opened up to European scientists after 1808, following the arrival of the Portuguese court in Rio de Janeiro. Also, commercial and shipping agreements (such as the 1810 Strangford Treaty) allowed the border to be opened up. Portuguese expeditions to the interior of the country were mainly to obtain gold. The British mineralogist John Mawe (1765-1829) was granted permission from the Prince Regent to visit the district of Diamantina, in Minas Gerais, between 1809 and 1810. The book about his travels², published in 1812, with maps, became an important source for other travelling scientists. Similarly, the work *Travels in Brazil*, published in 1816 by Englishman Henry Koster, who was born in Portugal as Henrique da Costa (1793-1820), was also used during expedition preparations. Koster came to Brazil at the age of 16 for health reasons and to establish a sugar cane plantation, sent by his father. It wasn't until that 1821 that the book *Notes on Rio de Janeiro, and the Southern Parts of Brazil, Taken During a Residence of Ten Years in That Country, From 1808-1818*, by English merchant John Luccock, was published.

A specialist in mining, geologist and geographer, the German Ludwig von Eschwege (1777-1855), who served as artillery captain in the Portuguese army, joined the Portuguese royal court in exile in 1809. He became director general of the gold mines in Brazil and headed other institutions linked to mining and mineralogy. For over a decade, he explored the country and carried out geognostic investigations, before returning to Europe in 1821. He helped numerous European naturalists who came to the Brazilian tropics, among them the Austrian members of the expedition (see below). As well as the accounts of his travels (in 1818 and 1830), Eschwege also published the results of his scientific research.

Baron Georg Heinrich von Langsdorff (1774-1852), the German doctor and naturalist in the service of Russia, who aboard a Russian sailing vessel had already visited the Brazilian coast during a circumnavigation under the command of Captain Adam Johann von Krusenstern, between 1803 and 1807. He came to Rio de Janeiro in 1813 as Russian consul general. In 1816, he acquired a property in Mandioca (now Magé), near the town of Rio de Janeiro, where in 1817 his visitors included the botanist and mineralogist Natterer, and the Germans Spix and Martius, all members of the Austrian expedition to Brazil. Langsdorff accompanied several excursions by zoologists and artists around Brazil. In 1830, he returned with his family to Germany.

The zoologist Georg Wilhelm Freyreiss (1789-1825) was from Frankfurt and came to Brazil as part of the Langsdorff delegation. He mainly collected birds and sent the specimens to various naturalist groups in Europe. He toured Minas Gerais with Eschwege.

After his return in 1815, while visiting Langsdorff, he met the Prussian botanist and naturalist Friedrich Sellow (1789-1831), whose original name was Selo. Sellow came to Brazil at the invitation of the Russian consul general. Between 1815 and 1817, the ornithologist Freyreiss and Sellow accompanied the expedition of Prince Maximilian zu Wied-Neuwied (1782-1867), who was also an excellent ornithologist. Both Sellow, who collected species in Brazil and Uruguay for 11 years, and Freyreiss, who worked in Brazil for 12 years, died in Brazil.

In 1818, Maximilian zu Wied-Neuwied sent his native guide, the Botocudo Indian baptized Joachim Quäck, to Europe, where he remained in the prince's service until his death in 1834. The prince published the account of his travels in 1820/21, documenting the fauna and flora of Brazil, as well as the indigenous population.



ALEXANDER VON HUMBOLDT
painting by Friedrich Georg
Weitsch, 1806.
NHMW

² MAWE, John. *Travels in the Interior of Brazil, Particularly in the Gold and Diamond Districts of the Country, Including a Voyage to the Rio de la Plata and an Historical Sketch of the Revolution of Buenos Aires*. London: 1812.

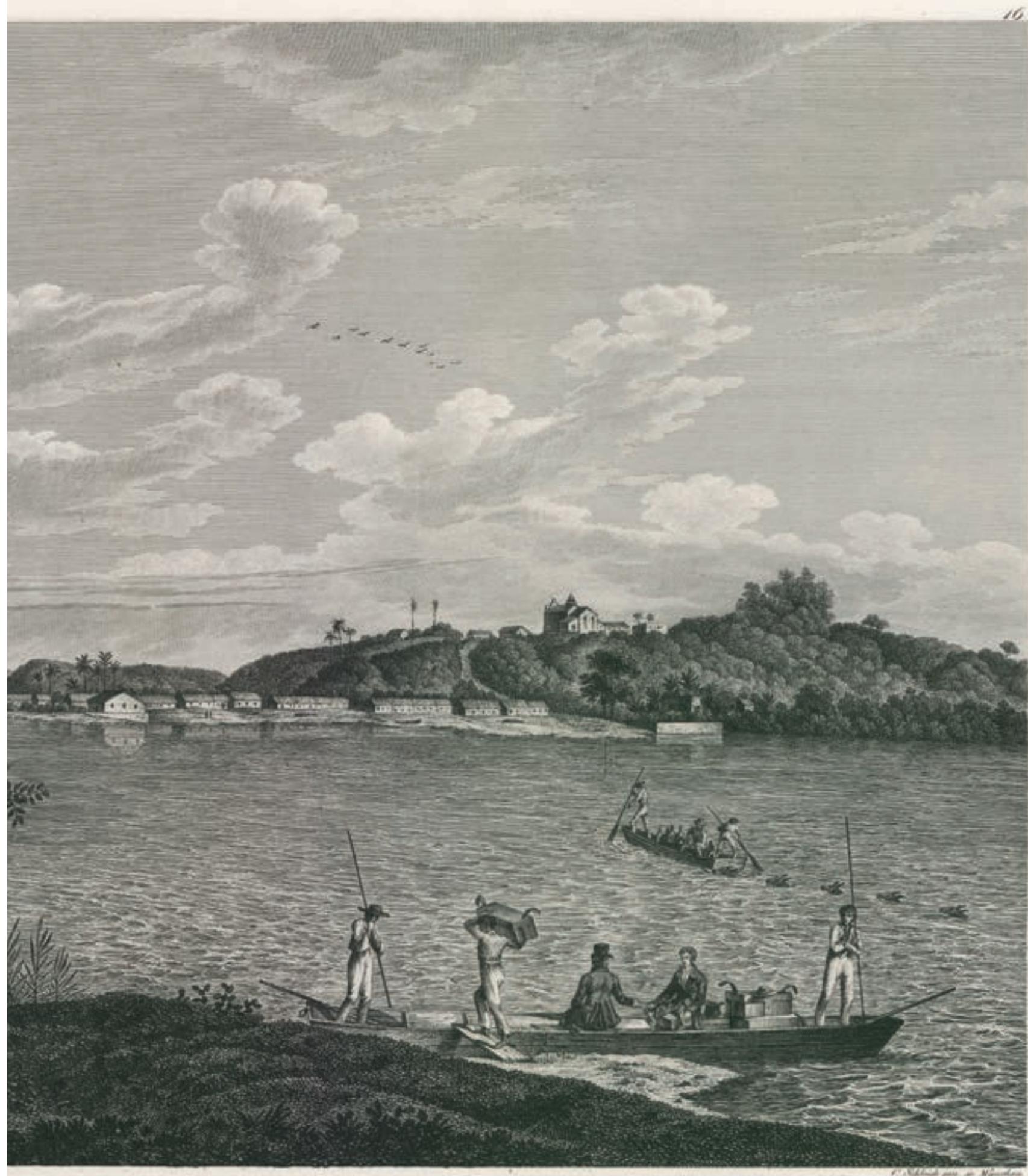


Entrance ticket to the Imperial Physical-Astronomy, Art, Nature Cabinet, 1802.
NHMW

MAXIMILIAN ZU WIED-NEUWIED
View of the Villa de Porto Seguro on
the Buranhém River. Engraving by Carl
Schleich the Younger, from a watercolour
by Maximilian zu Wied-Neuwied.
In *Travels to Brazil in the
Years 1815 to 1817* (Vol 2).
Copperplate engraving. Munich,
1820/1821.
NHMW



Ansicht der Villa

C. Schmid. grav. in. Münchm.

Ua von Porto Seguro am Flusse Buranhem

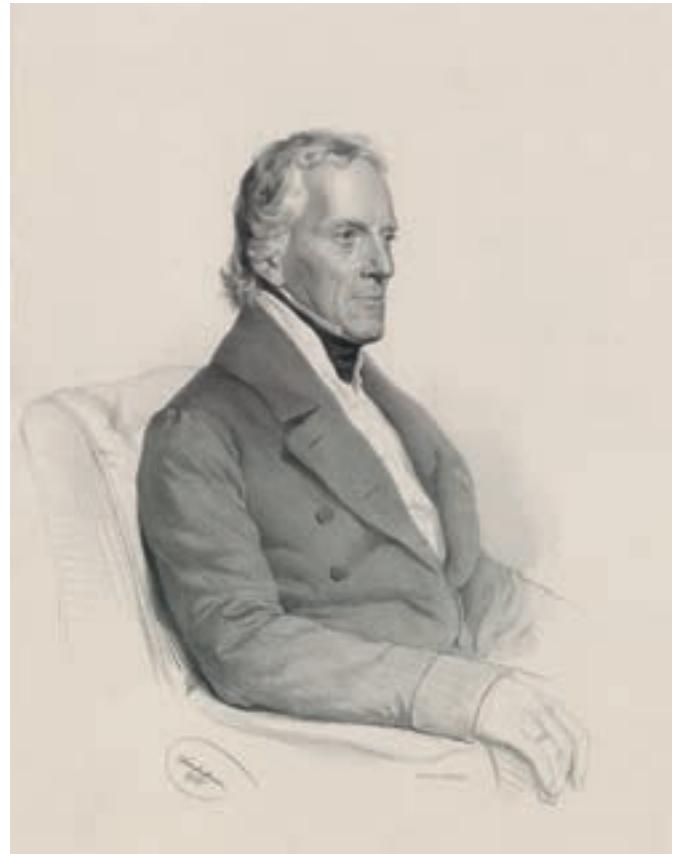
Preparations for the expedition

The careful preparations for the journey began on 29th November 1816, upon the conclusion of the matrimonial agreement between Archduchess Leopoldina and the king's son, João VI, Dom Pedro. Karl von Schreibers (1755-1852), director of the Imperial Natural History Cabinet, presented Emperor Francis I (II) with a proposal for an expedition to expand the natural history collections. The initial idea was to send just two naturalists from the imperial collections, assisted by a hunter. They would travel to Brazil, accompanied by ambassador Eltz, even before the Archduchess Leopoldina. The number of participants grew over the next weeks and months. Initially, the plan had been to research only the areas surrounding the points of arrival in Brazil, and bring species from there to the collections of the Imperial Natural History Cabinet, the gardens of the court and private collections of live animals in captivity. The Emperor entrusted the general coordination of the undertaking to the chancellor, Prince Klemens Wenzel Metternich (1773-1859). He had a good knowledge of the natural sciences and had assembled collections to high professional standards. Scientific and organizational counselling was handed over to the director of the Imperial Natural History Cabinet, Karl von Schreibers. Metternich and Schreibers were against a public tender, wanting to be able to choose the naturalists taking part in the expedition. As Schreibers later recalled, many "adventurers" presented themselves as candidates. He suggested a list be drawn up from which the most suitable naturalists for future enterprises might be chosen.³

Metternich wanted to organize something larger than the original programme. The chancellor thought the expedition shouldn't be just a collecting excursion for the Imperial Natural History Cabinet. He longed for it to acquire international recognition and sought the advice of renowned international scientists such as Alexander von Humboldt, who frequented his salons, and Johann Friedrich Blumenbach, asking them to send a list of questions and suggestions.

For the role of the expedition's scientific director, Metternich wanted to hire the well-known naturalist Kaspar Maria Graf von Sternberg (1761-1838). However, alleging health problems and the need to attend to his patrimony, Sternberg declined the invitation, but offered his services later, to analyze the expedition's botanical results.⁴

In his role as "consultant to the imperial scientific expedition to Brazil", Karl von Schreibers drew up the instructions to be met by all participants, establishing that all members of the expedition be subjected to the command of the ambassador and his representative, that all requests should be directed to both and that their orders should be obeyed in all respects. "In no way should private information be gathered, nor objects collected, nor observations made, without prior notice to the officials in charge and without their authorization."⁵ Instructions were also to be dealt with confidentially. However, the director of the Imperial Natural History Cabinet himself didn't obey this recommendation. Schreiber sent the instructions to the great German poet and writer Johann Wolfgang von Goethe, in Weimar, with whom he had been in touch since 1815.⁶ Goethe, who was deeply devoted to scientific research, took great interest in the planned journey to Brazil.



CARL VON SCHREIBERS
Josef Kriehuber, lithograph, Vienna, 1846.
NHMW

³ "To this end I'm thinking of drawing up for future use, a list of competent people – which could be greatly broadened – from the many people excited by the journey who have already come forward in this short time, and who have been recommended to me from various quarters, including many useful and promising names." [HHStA, St.-K. *Brasilien* 2, 1817 Schreibers, 6/1/1817]

⁴ Cf. Schweizer, (2009) 151.

⁵ HHStA, St. K. *Brasilien*, fol. 1-79.

⁶ Schneider, 96.



CASPAR STERNBERG
Maria von Sternberg, lithograph, n.d.
NHMW

In the section entitled "General observations about the scientific expeditions to Brazil", Schreibers explained:

"According to the latest and unanimous news about Brazil from travellers, especially the Englishmen Mawe⁷ and Koster⁸ – the former having followed the southeast coast of Montevideo, in the River Plate, as far as Rio de Janeiro, partly overland, partly by sea, then the interior regions to the northeast to the diamond region of Tijuco in the province of Minas Gerais; and latter the north-eastern coast of Pernambuco as far as Maranhão, towards the Amazon River, by sea, then the north-north-western districts inland as far as Ceará and the desert of Sentam, in Bolivia, overland – journeys are not subject to any dangers or special difficulties, at least in "cultured regions"⁹

In another section, Schreibers recommended the special map in the account *Travels in the Interior of Brazil*, London, 1815, by Englishman Mawe.

Being situated in the centre of the east coast of Brazil, Rio de Janeiro seemed a suitable departure point for the main expeditions; researchers would thus receive their food through the intermediation of the Austrian embassy. The plan was to undertake three or four exploratory journeys over two years. "The first will go to the northern provinces, penetrating as far into the interior as time and circumstances will permit, and then similarly, a second to the provinces to the south. The third will depart from Rio de Janeiro to the interior, to the provinces of the northeast, and the fourth to the west and southwest, either as one main journey or a small succession of excursions."¹⁰ It would soon emerge that choosing Rio de Janeiro as the starting point for all expeditions was not so very realistic.

Expedition plans were to be established in advance, indicating all lodgings, routes, dangers, the length, information about the return etc. The instruction was to maintain precise logs of all types of events – experiences, observations, reports, objects collected, with information about the location collected, local denomination and observations. Furthermore, orders were given to pay attention to animals and plants which might successfully be acclimatized in Europe. Live animals should only be sent if they were special, if transportation wasn't too complicated and they were expected to survive in Europe. Objects should be sent to the Emperor via the administration of the Imperial Natural History Cabinet, in Vienna.

7 MAWE, John. *Travels in the Interior of Brazil, Particularly in the Gold and Diamond Districts of the Country, Including a Voyage to the Rio de la Plata and an Historical Sketch of the Revolution of Buenos Aires*. London, 1812.

8 Henry Koster, *Travels in Brazil*. Londres: 1816.

9 HHStA St-K, *Brasilien*, K 1, fascicle 1, Schreibers 1.

10 HHStA St.-K, *Brasilien, Allgemeine Bemerkungen die naturhistorischen Reisen in Brasilien betreffend*.

The chapter entitled "Information and observations for the Journey to Brazil" recommended that participants put together a plan for the trip and their investigations. The information had to be useful as regards climate, dangers, wild animals, roads, a general panorama of the diversity of species and, especially, their particularities. There was also a supplement entitled "Journeys and Excursions" with information about places to be visited by the scientists. Initially, they were to visit the environs of the town of Rio de Janeiro, and then the neighbouring provinces to the west and northwest. Information followed about favoured aspects of scientific interest in the outlying regions; for instance, in the district of Cantagalo, the naturalists were to seek out natives with some rudimentary education, as well as monkeys, and prospect for gold etc.

As far as indications of the existence of cannibals were concerned, the "Systemic annual of the most curious natural products in Brazil to be given preference, observed, sought and collected" states the following: "Information should be collected about their life, habits and customs, with descriptions of their appearance or figurative representations and, if possible, a cranium should be obtained." Similarly, there are observations about mammals, birds, amphibians, fish, crustaceans, insects, minerals, fossils and plants. In referring specifically to animals, the text gives instructions about which species should be brought back dead or alive. It also indicates areas where certain animals are found, highlighting different types of monkey, bats, skunk, jaguar and armadillo.¹¹ In the case of whales, only certain parts were to be sent, such as the heart and eyes, conserved in alcohol, as well as parts which might be conserved and transported whole.¹²

Schreibers also made a list of equipment necessary for the scientific expedition to Brazil, and the respective costs.¹³ He listed the material and equipment for capturing mammals and birds: two double-barrelled shotguns; two hunting carbines; two compressed air rifles; a pump machine with tools; a manual pump; two hunting cases; two ammunition cases; a bag for shot; fine gunpowder; traps; the so-called "Berlin iron" (*Berliner-Eisen*, a metal trap for capturing wild animals of various sizes) and nets for catching birds; materials and tools for stuffing animals; instruments, needles, cork etc. for capturing and pinning insects; anatomical instruments; 1,000 small bottles, thick glass basins etc. for collecting and conserving intestinal worms; and, finally, observation and recording equipment and accessories, such as compasses, thermometers, anemometers, barometers, books, maps and writing material. For the "science of herbs" (=botany) they also provided cardboard for storing dried plants; blotting paper for absorbing liquid; paper for drying, describing and wrapping plants and seeds; tracing paper for separating; writing material (quills, pencils and India ink); three leather presses; a leather case for keeping material dry during excursions, magnifying glasses, binoculars, spades, saws, tweezers, drills, hammers and pliers, as well as metal cans, a metal thermometer, a tarpaulin, wrapping paper, string and rope for tying up parcels. There were also field guides for plants. In total, the material necessary was quoted at 5,097 florins (the currency of Austria at the time)

What was wanted was to gather "a rich collection, obtained through observation and experiences of all geographical, physical, anthropological, ethnographic, economic, technical and especially scientific aspects, as well as through plentiful collecting, corresponding to all the kingdoms, classes, families and genera of natural products".

JOHANN BAPTIST NATTERER
Drawing of a bird of prey, apparently an eastern imperial eagle, *Aquila heliaca* (Falconiformes, Accipitridae).
Pencil drawing.
NHMW

¹¹ HHStA *Brasilien*, Schreibers p.16.

¹² HHStA *Brasilien*, Schreibers p.18.

¹³ Orçamento, Schreibers, 12/20/1816,
HHStA, St. K. *Brasilien*, K1, fascicle 1.



Therefore the scientists weren't to stay very long in one place, especially if it didn't seem promising, collecting as quickly as possible in not very productive places, taking care to travel to the greatest number of districts, counties and provinces as possible, giving preference to those of greater distance and difference in terms of situation and physical characteristics, travelling to the country's centre and two poles.

The expedition's arrival was programmed for the month of May. Due to the rains until July, as well as the scientists' preparations and acclimatisation, only excursions to the environs of Rio de Janeiro were to be undertaken. Also, the expedition members were to be present for the arrival of the Archduchess Leopoldina, planned for August. It was supposed that the collections made by then would already be able to be transported to Europe on the returning vessels.

Biographical notes of participants, expeditions and results

When Sternberg turned down taking part in the expedition in the role of scientific director, Schreibers and Metternich put forward the name of Johann Natterer in his place. As well as Natterer, who since 1809 had been on the Natural History Cabinet payroll, Schreibers recommended the Viennese trader of natural specimens merchant Matthias Unterholzer to organize the lower classes of animals; the court groundsman at Belvedere castle, Heinrich Wilhelm Schott, as gardener; and Dominik Sochor, the Prince Regent Archduke Ferdinand's hunting assistant, as hunter and taxidermist. With the exception of Matthias Unterholzer, these proposed participants were accepted. It is also true that, at the request of imperial adviser and doctor Andreas Joseph Freiherr von Stiff, Natterer became the preferred choice to head the mission, over Johann Christian Mikan, the natural history professor at the University of Prague, something which generated conflict from the start. The specialist in mineralogy Johann Emanuel Baptist Pohl, also from Prague, was also called up. Apparently, the Emperor was interested in maintaining good relations between Vienna and Prague. The draughtsmen Thomas Ender and Johann Buchberger were hired as artists.

Travelling in the Archduchess Leopoldina's retinue were Rochus Schüch, his assistant Franz Josef Frühbeck, the painter Frick, the Archduchess's personal physician, Johann Kammerlacher,¹⁴ and Doctor Prataschewitz.

At the request of the Bavarian king Maximilian I Joseph, Francis I (II)'s father-in-law,¹⁵ botanist Carl Philipp Friedrich von Martius (born Erlangen 1794, died Munich 1868) and zoologist Johann Baptist von Spix (born Höchstadt 1781, died Munich 1826) were included in the expedition. In 1815 the Bavarian Academy of Sciences had made plans for an expedition to Brazil, but the undertaking had failed because of the high estimated costs.

The Emperor's brother Fernando III, Grand Duke of Tuscany, sent the naturalist Joseph Raddi (born Florence 1770, died Rhodes 1829). Johann Natterer complained about the choice of Mikan to both the Chancellor and the Emperor. To the latter, he wrote: "Mikan has no merit with the Imperial Natural Science Cabinet"¹⁶ and that he considered the decision a punishment and a disgrace. However, Stiff's influence with the Emperor was greater than that of Metternich, Schreibers and Natterer put together.

Natterer attempted to divide the expedition into two groups,¹⁷ Mikan leading only the botanical section, and he himself the zoological. His request was granted. The zoological group would include Natterer and Sochor, and Mikan and Schott the botanical.

An "Instruction of services for the expedition to Brazil by scientists Doctor Johann Christian Mikan, Imperial Botany Professor of Prague and Mr. Johann Natterer, assistant of the Imperial Natural Science Cabinet of Vienna",¹⁸ was drawn up, to be obeyed by both. The director of the Imperial Natural History Cabinet, Schreibers, was also informed that:

"The relationship between Mikan and Natterer will be determined by the natural consideration of their category of service, as well as by the scientific objects entrusted them. Both are under the direct orders of the Ambassador; therefore both must rigorously obey his instructions and direct to him their suggestions relating to planned excursions and the collecting to be done. Regarding position, Professor Mikan is above Mr. Natterer; however this position must not have a direct influence on the specific scientific fields entrusted to each."¹⁹



THOMAS ENDER
Grey shaded reproduction of a lithograph
by Franz Stöber, from a drawing by
Josef Dannhauser.
NHMW

¹⁴ Kammerlacher wasn't in the Austrian legation, as Schreibers states, *Österr. Naturforscher* (1820) 104. The legation doctor was Prataschewitz cf. Mikan (1833) 168

¹⁵ Francisco I (II)'s fourth marriage was to the daughter of Maximiliano I Joseph of Bavaria, Caroline Augusta (1792-1873).

¹⁶ Letter from Natterer to Emperor Francis I, 27/12/1816 HHStA St. K. *Brasilien* K1, fascicle 1

¹⁷ Letter from Natterer to Metternich on 27/12/1816, HHStA St. K. *Brasilien* K1, fascicle 1

¹⁸ HHStA, St. K. *Brasilien*, fol. 1-79
scientific expeditions

¹⁹ Communication to Schreibers, HHStA, St. K. *Brasilien*, K1, fascicle 2



THOMAS ENDER
Entrance to Guanabara Bay.
283x465mm
K. ACAD

Metternich put forward the name of landscape painter Thomas Ender (1793-1875), which the Emperor initially refused, claiming this was "unnecessary". Mikan then recommended the landscape painter and engraver Anton Pucherna, from Prague. Again, Metternich defended Ender's name, and this time concessions such as the handing over of drawings and paintings to the state and a cut in costs were successful. On 9th March 1817, Ender was given permission to take part in the expedition.

A few days later, on 17th March 1817, Mikan wrote to Metternich, mentioning the advantage, "were I to be granted an artistic and travel companion", of including a botanical draughtsman in the expedition able to produce botanical masterpieces "such as those seen in Vienna, Paris or London". Accordingly,

"my efforts, already known to Your Excellency, in finding such an artist willing to take part in this journey have not been without success. I have become acquainted with Herr Buchberger, whom many have praised as an excellent botanical artist, whose artistic output I've also found magnificent as regards the correct botanical representations, faithful to nature. With his specific knowledge, there couldn't be a better artist."²⁰

The Emperor agreed.

So in the end, who were the members of the Austrian expedition to Brazil?

²⁰ HHStA St.K. *Brasilien* 1 Letter from Mikan to Metternich, 17th March 1817 [Brasilien 2]

Johann Christian Mikan

Johann Christian Mikan²¹ was born in 1769 in Teplice, Bohemia, the son of the Viennese Anna Margot de Chabot (1739-1791) and Joseph Gottfried Mikan (1743-1814), of Prague. When the boy was two, the family moved from his birthplace to Prague. Encouraged by his father, he took an early interest in the natural sciences. He was personally mentored by Thaddäus Haenke, who had taken part in the 1789 Malaspina expedition and then lived in South America. After his studies in Prague, in 1793, Mikan briefly worked as a doctor, before devoting himself to botany and entomology. Still a young man, he made the first descriptions of the flies of native flowers (*sirfídeos*) and the vegetation of the mountain regions of Bohemia. In 1800 he became professor of natural history in Prague. In 1811, he undertook scientific expeditions to Malta, Spain and the Balearic Islands. The following year, he succeeded his father Joseph Gottfried when he retired from the post of professor of botany at the faculty of medicine of the University of Prague. In 1816 he was chosen by the Emperor to head the Austrian expedition to Brazil. A few days before departure, on 20th March 1817, he married Johanna Maria Woitrich (Wojtěch), who was then 35, in St. Stephen's Cathedral. After returning to Europe, he resumed his post as professor of botany at the University of Prague. He was also vice-director of the faculty of medicine and member of the academic board. For many years he occupied the post of secretary at the Imperial-Royal Patriotic-Economic Society in Prague. He was also member of numerous other scientific societies. Due to illness, he was obliged to spend various seasons in Italy, retiring in 1831. Mikan wrote poetry and sponsored benefit concerts. He died in 1844 in Prague at the age of 77.

The frayed relationship between Mikan and the other members of the expedition lead ambassador Eltz to recommend that Mikan be entrusted with accompanying the first shipment back to Europe. Eltz saw this as a way of saving between 700 and 800 florins, because Schott and Pohl, both excellent botanists, could assume his duties. The embassy secretary, Wilhelm Josef von Neveu, added in a secret note to Chancellor Metternich that Mikan was very presumptuous and arrogant, submitting the other members of the expedition to chicanery.²² The embassy staff feared for Austria's reputation.



JOHANN CHRISTIAN MIKAN
Friedrich Johann Gottlieb Lieder,
Johann Christian Mikan for his friends,
lithograph, Vienna, 1826.
NHMW

²¹ Hoppe NDB 17 (1994) 491, Wilhelm Ludwig Weitenweber in: *Lotus* (Prague 1852) 63-65

²² Letter from Neveu to Metternich, Rio de Janeiro, 18th April 1818.-HHStA St.-K, Dipl.Korr, *Brasilien* 2. Reports 1818, f.81r.

Scientific results of Mikan's collections

On 1st June 1818 the Austrian frigates *Austria* and *Augusta* set sail from the port of Rio de Janeiro. On board were professor Mikan, his wife Johanna, Giuseppe Raddi, Thomas Ender, the injured painter Buchberger, and part of Leopoldina's retinue. The travellers reached Vienna in the autumn. Buchberger became the expedition's first victim. After his return, he was given an apartment in Schönbrunn and an annual pension of 500 florins. He died in 1821 as a consequence of his accident.

Mikan took back to Austria "3 mammals, 49 birds, 37 amphibians, 16 fish, 3,000 insects, 6 crustaceans, 27 shells, 4 intestinal worms, 2 stuffed animals, 171 seed samples, 2,400 plants and 16 minerals"²³, as well as live animals for the zoological collections of the imperial gardens at Burggarten, Schönbrunn and Laxenburg. Whenever animals died, they usually ended up in the Natural History Cabinet, as was the case with a curassow, for example. This bird lived until 1820 in the Hof-Burggarten imperial garden, and was then stuffed for the ornithological collection (the male lived until 1825; the female until 1820).²⁴ [fig. 112]

As well as a capuchin monkey, the Mikans took to Vienna the first samples of golden lion tamarin, long-tailed monkeys and marmoset.²⁵

Among objects in that first batch, the greatest rarity was considered the specimen of young alligator which died during the journey and arrived at the Natural History Cabinet in Vienna conserved in spirits. A large number of butterflies brought by Mikan were later taken to the Brazilian Museum.

The results of the collecting work didn't only revert to the collections of the Natural History Cabinet; objects were also kept by Chancellor Metternich. The list shows his preference for curiosities: 8 barrels of wine, a small box of mate, a can of tobacco for inhalation, conserved fruit, 2 dead birds of paradise, 2 live parrots, as well as one which died on the journey, and 2 monkeys. Meanwhile, minerals and seeds from Brazil were taken to the Emperor's brother, the Archduke Johann, who was very interested in science.²⁶

In a report for Metternich, Karl von Schreibers opined that the greater part of Mikan's collection for the Natural History Museum was dispensable and could be donated to the University of Prague.²⁷ Schreibers also stated that the total figures for the professor's collection of insects and plants included items collected by the gardener Schott.²⁸ Mikan corrected this information, denying that he had incorporated Schott's collections of plants and insects into his, as Schreiber claimed. He said that Schott hadn't given him any insects and that the gardener's dried plants were in a sealed box which was only opened later, in Schreibers' presence.²⁹

²³ NHMW, Archiv für
Wissenschaftsgeschichte, Tabellarisch-
summarische Uebersichten In: Akten,
Brasilianisches Museum.

²⁴ Fitzinger, 1853, 183

²⁵ Mikan, 1833, 135

²⁶ Cf. Letter from Archduke Johann to
Vest, 8/12/1818; Franz Itwolf, Eh.
Johann and Dr. Lorenz Chrysanth Edler
von Vest. In: Mitt. des hist. Vereins f.
Steiermark 42, 105

²⁷ Letter from Schreibers to Metternich,
September 1819, HHStA, St. K. *Brasilien*,
K1, Fasz 3

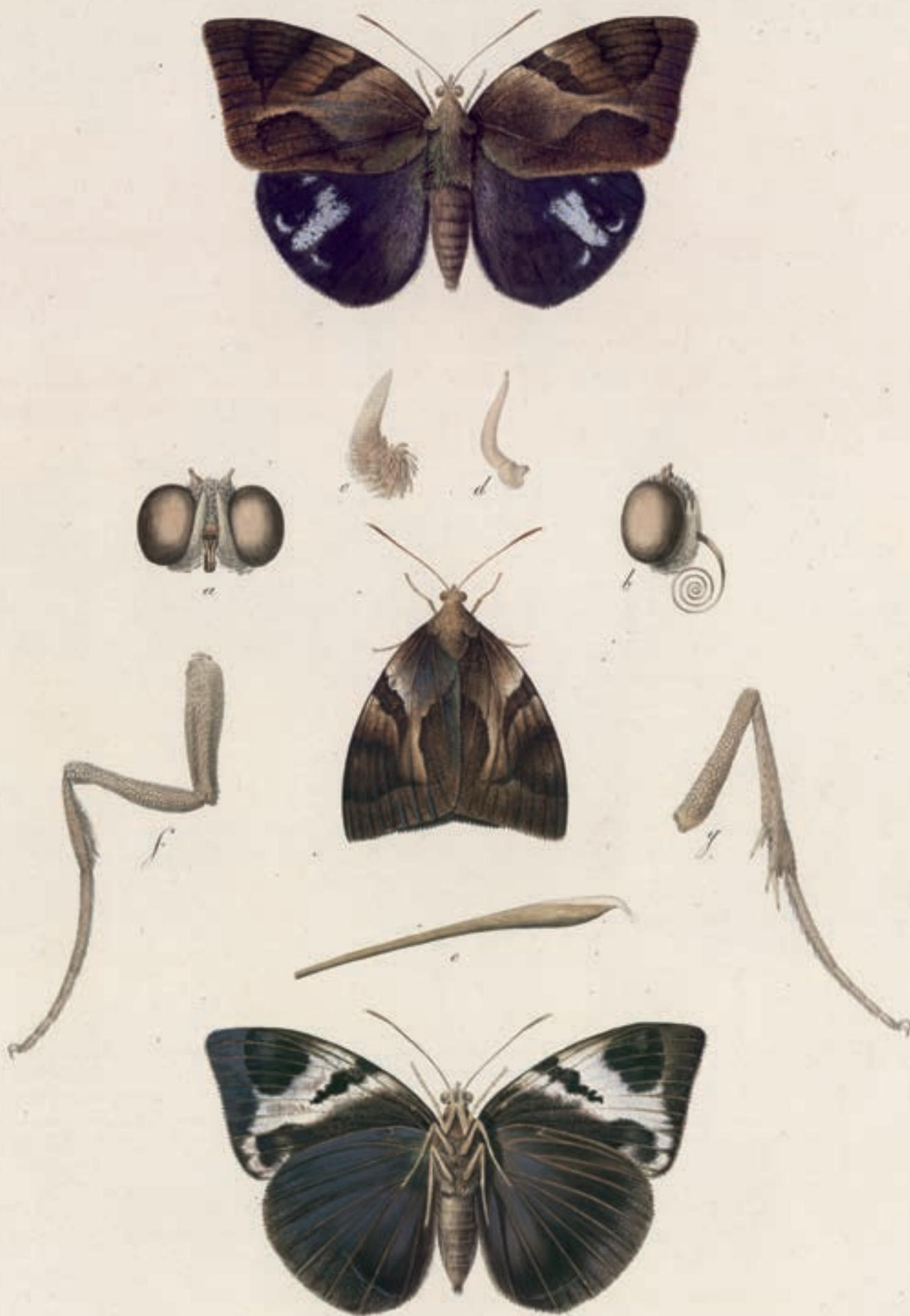
²⁸ Schreibers, *Nachrichten*, v. 1 (1820) 150
und 151

²⁹ Mikan, 1833, 98



Castnia schreibersi, butterfly, body length 6cm, wingspan 14cm. Mikan named this butterfly, collected by him in 1817 in Bahia, in honor of Karl von Schreibers. Its habitat is restricted to Brazil.
NHMW

MICHAEL SANDLER
Castnia schreibersi, hand coloured lithograph, printed by the Lithographic Institute of Vienna, 1820. The butterfly was named in honor of the director of the Imperial Cabinet of Natural History, Karl von Schreibers.
NHMW



Castnia Schreibersi.

In 1823, Mikan requested that his annual salary be increased by 1,000 florins, in recognition of his merits regarding the Austrian mission to Brazil. Chancellor Metternich, to whom this request was made, asked for Schreibers' opinion. Having been against Mikan's participation in the expedition in the first place, Schreibers didn't want to give an opinion before all the results of the material collected had been presented, but concluded his response by observing that it was unlikely the value of Mikan's collection would correspond to even that of the equipment acquired. After obtaining the opinion of other specialists, Metternich managed to secure for Mikan an award of a few hundred additional florins.³⁰

Mikan published new descriptions of various plants and animals between 1820 and 1825, in the deluxe volume *Delectus faunae et floriae brasiliensis*, the highlight of which was the superb quality of the illustrations by Buchberger, Bauer, Knapp, Stoll, etc.

Buchberger is the only artist illustrator in this work who actually went to Brazil. Most drawings of the plants were from the herbarium, since only a few live plants were available to the artists. Mikan dedicated the work to Chancellor Metternich, not the Emperor.

Mikan dedicated the first family described in the book as a single species, *Stiffiachrysantha*, to Freiherr von Stiff, the chief director of medical studies and the Emperor's first private doctor, as a sign of gratitude for putting his name forward to take part in the expedition.

As a tribute to Metternich, he named a plant of the Solanaceae family *Metternichia princeps*; and to Schott, *Gloxinia Schottii*. The botanic genus *Esterházya* with its species *Esterházya splendida* [92], of the Scrophulariaceae family, was named after Prince Nikolaus Esterházy, the great patron of botany and collector of rare plants.

To the director of the Imperial Natural History Cabinet, Mikan dedicated the species of butterfly *Castnia schreibersi*. However, Mikan wasn't able to be more diligent with the zoological species brought from Brazil, having been forbidden from using the zoological archive, a sign that this was Natterer's domain and that he was not to take someone else's credit.³¹

MICHAEL SANDLER

From a watercolour by Johann Buchberger, *Esterházya splendida*, hand-coloured lithograph, printed by the Lithographic Institute of Vienna, 1820. Mikan dedicated this genus of the Scrophulariaceae family to Prince Nikolaus Esterházy, the great patron of botany and collector of rare plants.

NHMW

³⁰ Cf. Kadletz-Schöffel, 238 239.

³¹ Blaas, *Österreichs Beitrag* (1976) 31 and Obs. 59)



Esterhazya splendida.



Stiftia chrysanthia

JOHANN KNAPP

From Ferdinand Lukas Bauer, *Stiftia chrysanthia*, hand-coloured lithograph, printed by Adolph Friedrich Kunike, 1820. Mikan dedicated the plant genus to his patron Andreas Stiff, the emperor's private physician. The plant was picked in Sebastianópolis.

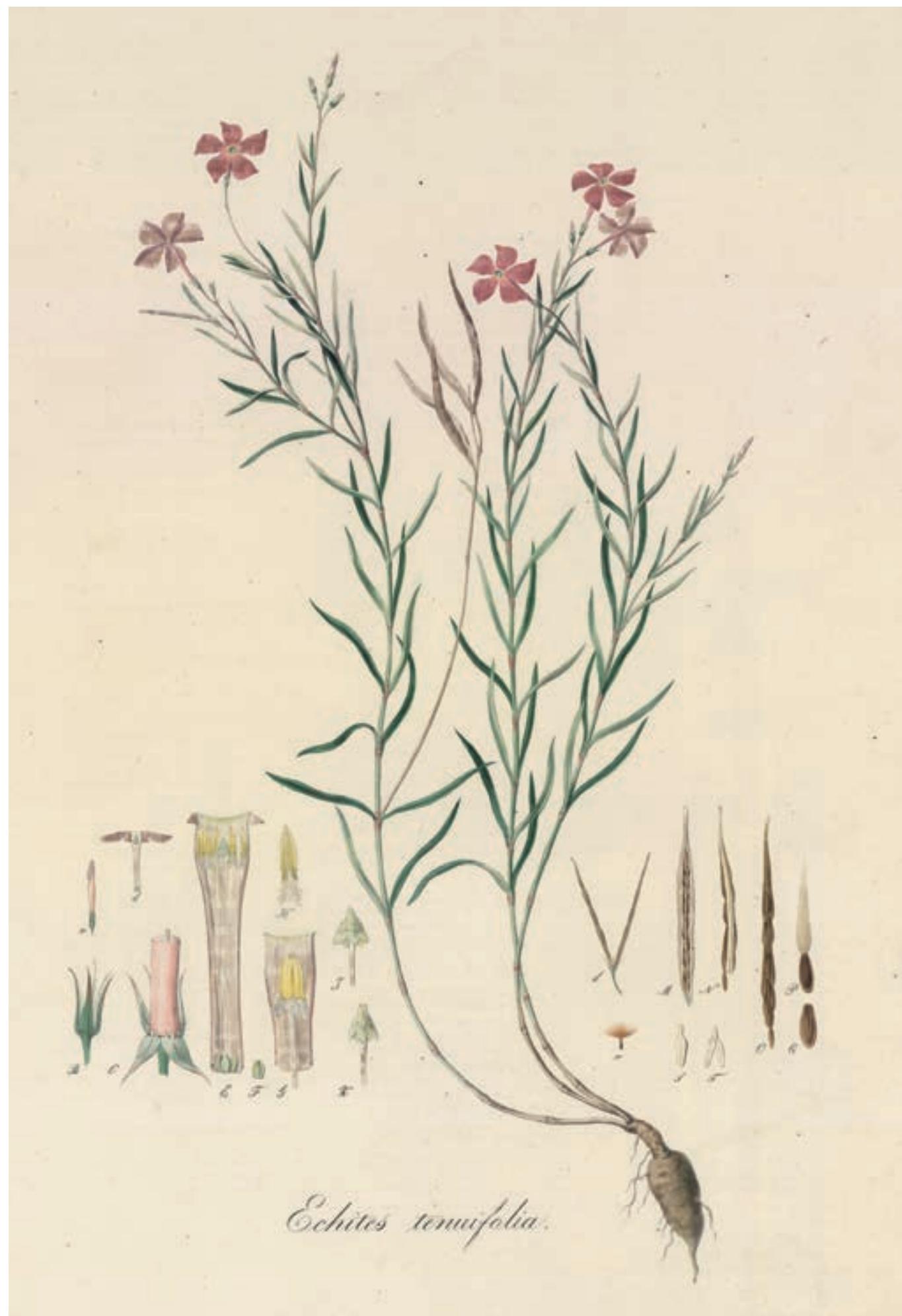
NHMW

Stiftia chrysanthia MIK[an], Mikan, collected by Johann Christian Mikan in Brazil. Mikan dedicated the genus to Andreas Stiff, his patron and private physician of the emperor. This sample is from Jacquin's herbarium [Hb.Jacq.].
NHMW

NATURHISTORISCHES
MUSEUM WIEN

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JOHANN CHRISTIAN MIKAN
Franz Kolb, from a watercolour by Johann
Buchberger, *Echites tenuifolia*,
hand-coloured lithograph, printed by the
Lithographic Institute of Vienna, 1820.
NHMW

JOHANN CHRISTIAN MIKAN
Michael Sandler, from a watercolour by
Leopold von Stoll, *Jacchus chrysophygus*,
Natterer, hand-coloured lithograph,
printed by the Lithographic Institute of
Vienna, 1820. This animal was killed by
Natterer in Ipanema and delivered to
Mikan, who took it to Austria.
NHMW



Alouatta palliata Valenciennes

Heinrich Wilhelm Schott

Heinrich Wilhelm Schott³² was born in 1794 in Brünn, the son of gardener Heinrich Schott (1759-1819). At the age of seven, he moved to the capital with his father, who was appointed chief gardener at the Botanical Garden of the University of Vienna. After finishing secondary school at the Benedictine school (*Schottengymnasium*), he studied botany, agriculture and chemistry at the University of Vienna, with Nikolaus Joseph and Joseph Franz von Jacquin, among others. From 1809 to 1813 he was his father's assistant at the university Botanical Garden and, from 1815, at the "Flora of Austria" garden at the Upper Belvedere palace, also working as an assistant at the botany faculty. A monograph about the *Silene* genus, begun at that time, was left unfinished.

Schott's name was selected to take part in the mission to Brazil from the start. Following his return in 1822, he was named adjunct gardener of the botanical gardens and zoo at Schönbrunn, then in 1828 head gardener, and from 1840 he was also in charge of the "Flora of Austria" garden at the Upper Belvedere palace and, in 1845, director general of the court garden and collection of animals (Menagerie). At the Menagerie he introduced the fairer treatment of the animals. It is thanks to him that part of the park at Schönbrunn palace was transformed from the French style into an English garden, highlighting the natural landscape. The origin of the garden of Alpine plants which exists to this day at Belvedere palace was a collection that Schott kept of rock mountain plants from all over the world. Beside this, he created a vast herbarium. Scientifically, he mainly devoted himself to the family of Araceae, becoming the greatest specialist in this topic. From his own pocket, he commissioned over 3,400 pictures of Araceae, as well as numerous illustrations of other botanic families. He described and denominated many genera of plants we now know as ornamental, such as *Philodendron*, *Spathiphyllum*, the genus of fern *Nephrolepis* etc.

From a scientific point of view he is considered the most significant among the court gardeners, and Schott also stood out as a mentor for young scientists. His scientific work brought him various honours, such as the title of doctor of philosophy at the University of Jena, in 1858, corresponding member of the Academy of Sciences, knight of the Imperial Austrian Order of Franz Joseph, official of the Mexican order of Guadalupe, and honorary member of numerous associations and societies. He died in 1865 in Schönbrunn, near Vienna.

Schott wrote numerous scientific works, such as *Meletemata Botanica*, with Endlicher, in 1832. He never continued his work about ferns, begun in four fascicles, after Karl Presl also published a book about ferns. Little is known about this family. He had at least five children, of which there is documentation³³ for Sophie, Rosa and Marie. His son Ferdinand (1830-1889) was a renowned anatomist who became professor of anatomy, pathology and histology at the University of Innsbruck in 1869.



HEINRICH WILHELM SCHOTT
Berthold Winder, albuben silver print,
Vienna, ca. 1860.
NHMW

³² Biography in large part based on the book by Christa Riedl-Dorn, *Schott, Heinrich Wilhelm* In: NDB vol.23 (2007) 494-495.

³³ Letter from Johann Natterer to Karl von Schreibers, 10/11/1817, ÖNB Autographen (autograph collection) 463/34-1.

Schott and the acclimatisation garden

The scientific gardener Heinrich Wilhelm Schott was answerable to Mikan. The director of the botanical garden Franz Boos Hofgarten (1753-1832), the professor of botany and chemistry Franz Joseph Jacquin (1766-1836) and the botanist, imperial adviser and court doctor, Nicolaus Thomas Host (1761-1834) drew up instructions for him. On 18th February 1817 the Emperor ordered that these instructions be “given not only to Professor Mikan but also the gardener Schott, and to be strictly observed”.³⁴

Schott didn’t travel in the same vessel as Professor Mikan. Since the *Augusta* had become unseaworthy on 11th April, remaining for some time in the port of Chioggia (Chiozza), Schott began to make his first collections there. He sent a parcel with plants and another with seeds to Schreibers. As well as lists of plants, he described plants he considered new. The descriptions and lists, as well as the accompanying letter, were published on 7th February 1818 in the journal *Erneuerte vaterländische Blätter für den österreichischen Kaiserstaat*.³⁵ Schott also made an account of the use of medicinal plants by pharmacies. The next shipments of plants came from Gibraltar, where the ship docked on 17th June and remained until 1st September, and from Algeciras (Spain).³⁶

After Mikan’s departure, Schott remained in the environs of Rio de Janeiro and started receiving the same salary as Natterer and Pohl.

While the remaining members undertook exploratory journeys around the country, Heinrich Wilhelm Schott was obliged to remain in Rio de Janeiro in order to prepare the live plants and animals for the crossing to Europe and the new conditions awaiting them there. To this end, he created an acclimatisation garden, designated the “imperial botanical garden”, which belonged to the Austrian legation. Schott’s collecting activities were restricted to the environs of Rio de Janeiro, but he also needed to supervise the collections being made by Natterer and Pohl until their transportation by sea. Unable to find a suitable assistant, he wrote to Metternich in 1819 asking for financial help to adequately wrap the plants, and a gardening assistant he could entrust with the care of the plants during the crossing. He also requested that, as well as this assistant, he be sent bales of blotting paper, various sizes of bottles and 15,000 pins for mounting insects.³⁷

The apprentice Joseph Schücht was sent by Boos, head of the imperial botanical garden, to Schreibers, so that he might meet him personally. Schreibers examined the future gardener and considered him “commendable”³⁸ both from the point of view of behaviour and his physical aspect. On 18th August 1819, the Emperor authorized Schücht to travel to Brazil in order to accompany to Europe the collections prepared there.³⁹

The journey was not very straightforward: Schücht was to leave in early October by mail coach to Berlin, and there meet up with Lieutenant-Colonel Feldner, of Silesia, who would decide from which port – Bremen, Hamburg, London or Lisbon – they would depart for Rio. These ports appeared more attractive than Trieste, since they could already reach Brazil in the summer, February, the best time of year. From Trieste sailings were much later and wouldn’t reach Brazil until the rains, in June.⁴⁰ A month-long overland journey was planned, in addition to the three-month sea crossing. A circular was sent to all imperial legations and consulates in the area of influence of the port Schücht was to depart from, instructing them to secure the necessary support with expenses for his crossing to Rio, or an agreement with the captain that, upon arrival in Rio de Janeiro, the local legation would cover any expenses incurred.⁴¹

34 Letter to director von Schreibers, Vienna, 18/2/1817 HHStA St.-K *Brasilien* 2 Konv.2

35 *Erneuerte vaterländische Blätter für den österreichischen Kaiserstaat* 11 (7. Februar 1818) 41-44

36 *Isis or Encyclopädische Zeitschrift von Oken* Jg 1818 H 1 (Jena 1818) 818-822

37 Cf. HHStA, St. K. *Brasilien*, Kon 1819, Fasz 6, Kt 4

38 HHStA St.-K *Brasilien* 1317 Karl v. Schreibers, Vienna, 5th August 1819

39 HHStA St.-K *Brasilien* Kaiser Franz, Schönbrunn 18th August 1819

40 31st August 1819, Schreibers

41 HHStA Wiss 3/6-266 Schücht 10th October 1819



HEINRICH WILHELM SCHOTT
Wenzel Liepoldt,
Zomicarpa Riedeliana S[chott],
gouache, n.d.
NHMW

HEINRICH WILHELM SCHOTT
Wenzel Liepoldt,
Caladium hastatum Lem,
gouache, n.d.
NHMW

ZOO. TERR. PALAT. VISION
SCOTT ALEXANDER



Caladium hastatum Linn.

Scott Alexander



HEINRICH WILHELM SCHOTT
Wenzel Liepoldt,
Dffenbachia barguiniana,
gouache, n.d.
NHMW

HEINRICH WILHELM SCHOTT
Johann Oberer,
Anthurium affine S[chott],
gouache, n.d.
NHMW



Schücht, who arrived in Brazil in March 1820, began answering to Schott and received the same remuneration as Sochor.

On 4th June 1820, Schott left on his first independent expedition. He spent most of the time in the region of Aldeia da Pedra and São Fidélis, before returning to Rio de Janeiro via São Salvador, Fazenda São João de Paraíba, Quissamã, Magé, Medruga and Porto Velho, arriving in the capital on 1st October 1820.⁴²

Together with the painter Frick, who was released by Leopoldina, Schott travelled from January to March 1820 through the province of Rio de Janeiro to Macacu and the district of Cantagalo, exploring the entire region. His accounts of this trip were published in 1822 as an annex to the second volume of Schreibers' work *Nachrichten von den kaiserlichösterreichischen Naturforschern in Brasilien und den Resultaten ihrer Betriebsamkeit*.⁴³ Just like the other scientists, Schott didn't restrict himself to natural items, but also acquired ethnological objects, produced vocabulary lists of the native languages (language samples of the Camé, Coropo and Puri)⁴⁴ and visited different indigenous tribes.⁴⁵ He and his companions were forced to cancel other planned trips due to the political turbulence. King John VI left Brazil on 26th April 1821 because of the alarming unrest, returning to Portugal. The same month, the naturalists' mission was dissolved and all the scientists received orders to return to Europe. A last attempt by Schott, Frick and Natterer to continue their expeditions with reduced resources and waiving their personal allowances, was denied.

Schott began his journey home in 1821, following the legation orders. Frick also returned, since his salary was no longer being paid.

A few weeks after Pohl's departure, on 21st June 1821, Schott left Rio de Janeiro aboard the French vessel *Egmont*, accompanied by the Austrian ambassador. Only Natterer, Sochor and Rochus Schücht remained, the latter in the service of Princess Leopoldina.

Carrying basket
Heinrich Wilhelm Schott
(1794 Brünn – 1865 Vienna),
26cm x 11cm x 71cm.
Schott collection.
Weltmuseum Wien

⁴² Schreibers, *Nachrichten* Vol. 2 (1822), 105.

⁴³ Cf., Heinrich Schott, *Tagebücher des k.k. Gärtners, Hrn. H. Schott in Brasilien, von dessen Reisen in die Campos am Paraíba und Paraibuna = Flusse und durch den Distrikt von Canta Gallo; dann nach Macacu und am Flusse gleichen Nahmens, Von Rio de Janeiro aus* [Diaries of imperial gardener, H. Schott, in Brazil, of his expeditions to Campos on the rivers Paraíba and Paraibuna and through the district of Canta Gallo, then Macacu and the river of the same name, leaving from Rio de Janeiro]. In: Schreibers, Karl von: *Nachrichten von den kaiserlichösterreichischen Naturforschern in Brasilien und den Resultaten ihrer Betriebsamkeit*. [News of the Austrian imperial naturalists in Brazil and the results of their activities], v. 2 (Brünn 1822), Annex I, 1-80; summary in Schreibers, *Nachrichten*, v. 2 (1822) 105-108.

⁴⁴ Bettina Kann, (1992) 105

⁴⁵ Published in Schreibers, *Nachrichten*, v. 2, 1822, annex

Scientific results of Schott's collections



From Brazil, Schott took or sent over three shipments to the Imperial Natural History Cabinet in Austria: "212 amphibians (118 collected by Schücht), 3 fish, 19,149 insects (2,442 collected by Schücht), 1 crustacean, 1 animal of the radiata rank, 43 arms and equipment [of the Puri, Camé and Coropó], 196 seeds, 9,554 plants and 199 wood samples."⁴⁶ Also, 76 cases filled with live plants were sent to the palace at Schönbrunn.⁴⁷

Numerous indoor plants got their scientific names from Schott, such as the *Philodendron*, for example.

The Menagerie (Imperial Zoological Collection) at Hof-Burggarten in Vienna received from the Schott collection birds such as the Hocco (*Crax alector*) and Mitu (*Mitu tuberosa*), as well as a "very wild alligator (*Champsas fissipes*)"⁴⁸, which however only survived a short time. The magazine *Isis* gave this account:

"...a Brazilian alligator (*Crocodilus Sclerops*) of respectable size, measuring 5 feet 3 inches in length, probably the largest specimen among the few live crocodiles yet brought to Europe, generally of the type living in North America and known there by the name alligator (*Crocodilus Lucius Cuv*). It was obtained by the imperial gardener Herr Schott in September 1819 on an expedition to the district of Cantagalo, near St. Salvador, from a lake, and was taken to Rio de Janeiro, where it stayed in captivity for 20 months before this shipment. Upon arrival it seemed well fed and gave an indication of its continued strength by violently biting one of the guards, who had become absent-minded because of the animal's apparent slowness, sluggishness and supposed lack of flexibility; however, after a fortnight it passed away, unexpectedly and without any signs of illness, although an autopsy revealed it was suffering an inflammation and cancerous tumours in the stomach. This fine example of crocodile didn't only provide our local scientist friends a rare opportunity to get to know the appearance and behaviour of such a live animal, but also the chance, rarer still, to compare it with a true crocodile of the *Crocodilus acutus* family, which arrived five months ago from Santo Domingo (see no. 98 of this journal) and which lives still."⁴⁹

Already in 1820, the *Neue brasiliische Pflanzen. Gesammelt und nach der Natur beschrieben von Heinrich Schott, k.k. Gärtner in Brasilien* [New Brazilian plants, collected and described according to nature by Heinrich Schott, imperial gardener in Brazil] was published in the Medicine Annuals (Medizin. Jb. Der k.k. Oest. Staates VI/2 (p. 59-67)). His expedition account, written in diary form, appeared in the second volume by Karl von Schreibers, *Nachrichten von den kais. Österr. Naturforschern in Brasilien und den Resultaten ihrer Betriebsamkeit* [News of the Austrian imperial naturalists in Brazil and the results of their activities] (Brünn 1822). His vocabulary lists and language samples of the Camé, Coropo and Puri⁵⁰ tribes were also published as an annex, along with botanical descriptions in Annex II, "new Brazilian plants".

Just like Mikan, who had already collected specimens on the outward journey in Pola, La Valletta (Malta), Gibraltar and Madeira, Schott also sent straight to Vienna the results of his collections of European plants. Schott's descriptions of the plants collected were published in Schreibers' *Nachrichten...*, as well as in the journal *Isis oder Encyclopädische Zeitung* by Oken (Jena, 1818).⁵¹

⁴⁶ Archiv für Wissenschaftsgeschichte NhM, Tabellarisch-summarische Uebersicht...Akten: Brasilianisches Museum.

⁴⁷ HHStA OMeA 1856 67/1

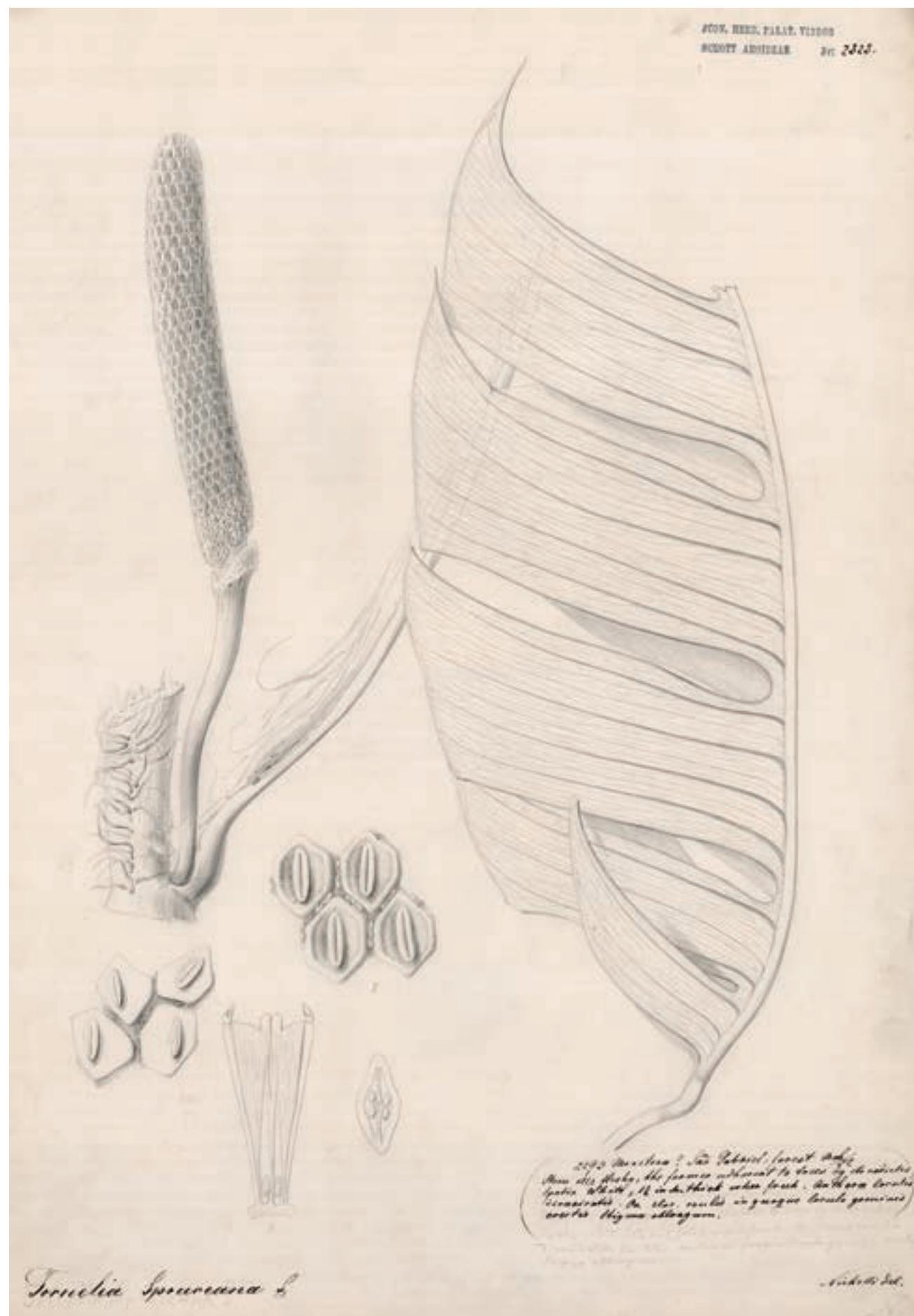
⁴⁸ Fitzinger, 1853, 189.

⁴⁹ *Isis ou Encyclopädische Zeitung* VII, 721

⁵⁰ Heinrich Schott, *Tagebücher,*

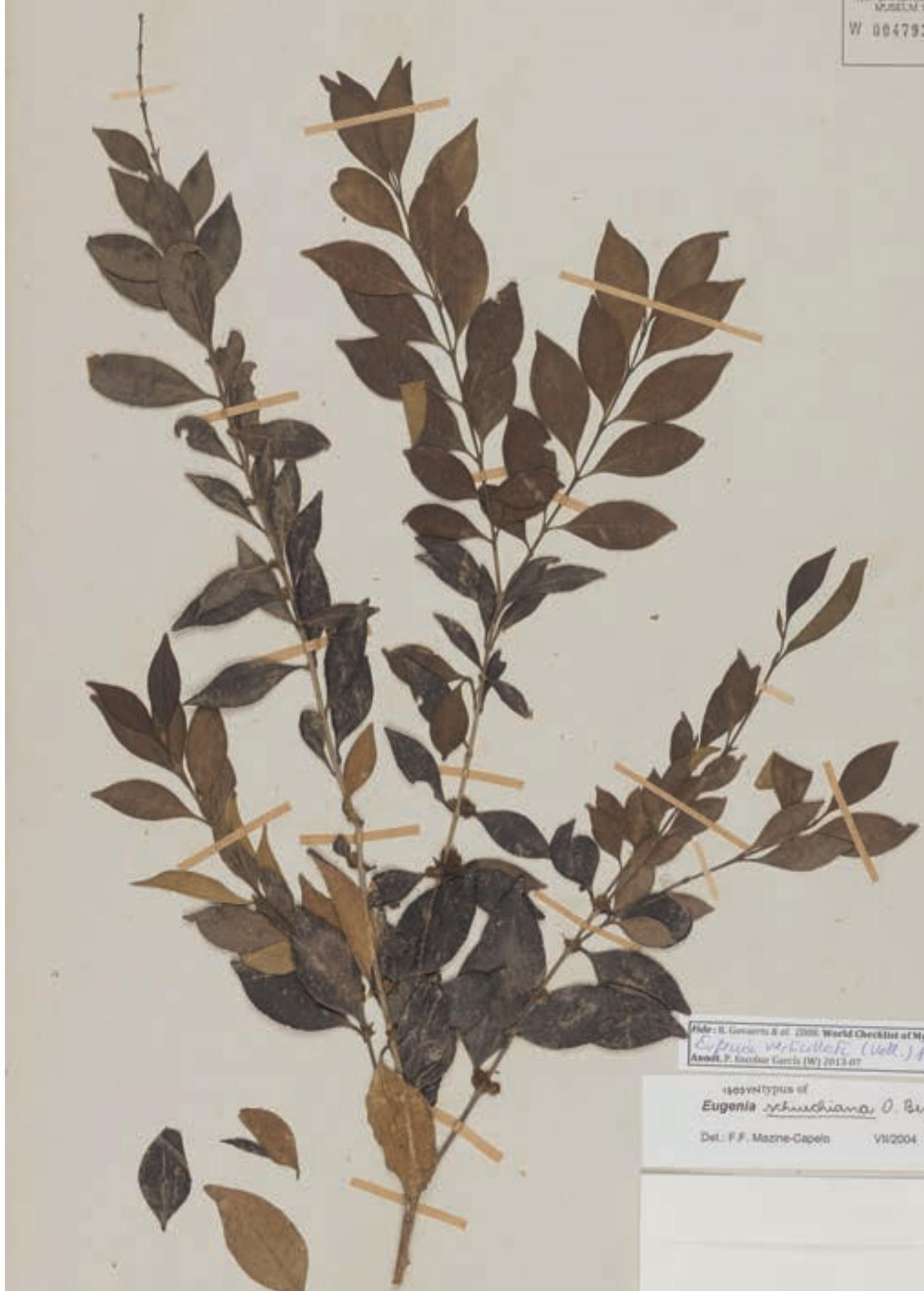
Sprachproben von den Puri 22, von den Camé 41-47, von den Coropó 48-51 [Diaries, Language samples of the Puri, Camé and Coropó].

⁵¹ *Isis ou Encyclopädische Zeitung*, Lorenz von Oken (Jena 1818), 818-822.



HEINRICH WILHELM SCHOTT
Nickelli, *Tornelia spruceana* S.,
pencil, n.d.
NHMW

HEINRICH WILHELM SCHOTT
Eugenia schuechiana BERG, collected near
Rio de Janeiro and named after Rochus
Schüch, Leopoldina's teacher.
NHMW



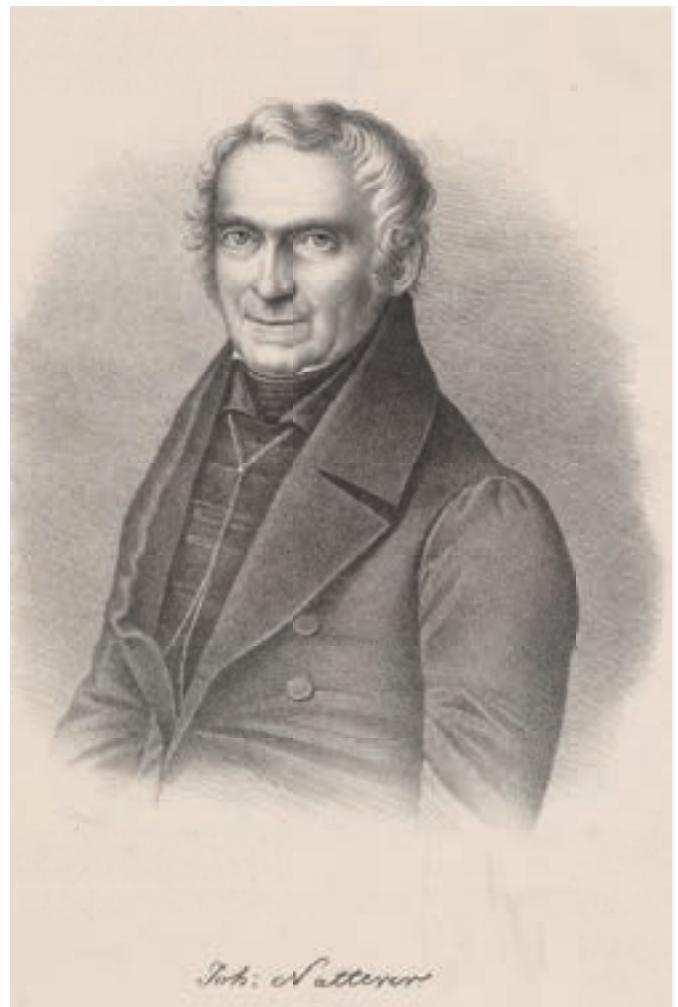
2819
Eugenia schimperi O. Berg
No. de Veneza
12.06.1907
Sobato

Johann Natterer

Johann Natterer was born on 9th November 1787 in Laxenburg, the son of the Emperor's last falconer, Joseph Natterer, and his wife Maria Anna Theresia, née Schober. His father sold his collection of prepared animals to the Emperor and managed the recently created Imperial Zoological Cabinet (Zoologisches Hofcabinet). There, the young Natterer had the opportunity to be introduced by his father to the art of taxidermy. After finishing secondary school, he attended Natural History courses at the Royal Academy and University of Vienna. He also learned how to draw. From 1804 he undertook a few expeditions to collect material in the countries making up the Austria-Hungarian empire. In 1809 he was employed by the Imperial Zoological Cabinet. In 1810 he accompanied the transfer of valuable objects from all the collections to Timisoara (today, Romania). At that time, he travelled to the border with Turkey with the hunter Sochor, who was later to become his faithful companion in Brazil, in order to collect objects for the natural history collections, and to hunt. Shortly afterwards, he was entrusted with transporting to Vienna, on a last-minute trip, the personal belongings of Archduchess Maria Ludovica – later Marie Louise –, which she would need for her marriage to Napoleon. Later, he returned to Timisoara in order to repatriate the objects protected from the French, returning them to Vienna. In 1815, at the orders of the Emperor, Karl von Schreibers and Johann Natterer travelled to Paris in order to organize the return of art treasures, libraries and objects in the Coin and Antiquity Cabinet, sequestered from Austria in 1809 by Napoleon. Natterer's efforts in favour of the collections during the years of French occupation and the return of the objects are among the reasons for his promotion, in 1816, to the post of "supervision assistant" in the Imperial Natural History Cabinet.

Natterer would only return to Vienna in 1836, when he returned to his position as adjunct curator at the Imperial Natural History Cabinet. He examined its collections and began to process the rich items collected during the expedition, in particular the birds. In doing so, he visited various museums and made contact with scientists, with whom he exchanged material. One highlight among numerous honours he received is the title doctor *honoris causa* from the University of Heidelberg. Natterer died on 17th June 1843.

In 1831, he married Maria Josepha do Rego (1807-1837) in Barcelos, and they had three children. Two died before his return to Europe; in Vienna in 1837, Natterer lost his 11-month old son, Adolph. In December of the same year, his wife also passed away, the victim of a pulmonary disease that Natterer attributed to the severe European climate.⁵² Only his daughter Gertrud (1832-1895) survived, her name an homage to someone who had saved his life in Brazil. She married Julius von Schröckinger-Neudenburg⁵³, a financial employee who, as vice-president of the Zoological/Botanical Society, also nurtured an interest in science. The famous English naturalist Alfred Russel Wallace recounts meeting a daughter of Natterer's, the fruit of his union with an indigenous woman,⁵⁴ during his expedition to the region of the Amazon and Negro rivers, between 1848 and 1852.



⁵² Cf. *Letter from Johann Natterer to Johann Carl Hocheder*, Vienna, 30th December 1838, WStLB, HS, 7888, 111-114; cf. *Letter from Johann Natterer to J.G. Schwartz*, Vienna, 17th February 1838, WStLB, HS, 7888, 6r-6v. *Die Wiener Zeitung*, Nr. 283, dated 12/12/1837, 1626, death notice of Natterer's wife, Maria Josepha, at the age of 30.

⁵³ Julius Schröckinger-Neudenburg (1814-1882, baron since 1870) was vice-president of the Finance Authority of Lower Austria and head of the department in the Ministry of Agriculture, cf. ÖBL, v. 11 (1999) 228.

⁵⁴ See A. Russel Wallace, *A Narrative of Travels on the Amazon and Rio Negro with an Account of the Native Tribes and Observations on the Climate, Geology and Natural History of the Amazon Valley* (London, 1853) 216

JOHANN BAPTIST NATTERER
Michael Sandler,
Lithograph, Vienna, n.d.
NHMW

Despite repeated appeals by the Austrian government for them to return home (dated 1821, 1827 and 1830, among others), Johann Natterer and Dominik Sochor – who died in 1826 in São Vicente (Mato Grosso) – stayed in Brazil. Natterer got around the first order to go back by explaining he had to meet Sochor, who was expecting him in Ipanema to fetch equipment stored there. He wrote to Vienna saying he'd managed to dodge the ambassador in this way and claimed the situation in Brazil had improved.

Natterer only decided to return in 1835, after losing almost all his belongings during the revolts in Belém (Pará), including some of his diaries and notebooks. The rich collection of live animals destined for the imperial zoological collection (Menagerie) was stolen by looters. Especially painful was the loss of a tapir, which was soon devoured by the thieves.

Regarding sources, much was destroyed. In around 1818, an English liner was attacked and the legation reports sank; in the political turmoil in Pará in 1835, objects and notes were destroyed; and in 1848 many notes and copies were lost to a fire on the top floor of the Imperial Natural History Cabinet. But Natterer's diaries were not among the objects destroyed, as is often stated, having been out on loan at the time. There are diary fragments in both the Naturhistorisches Museum Wien (NHMW) and the Weltmuseum Wien.

Natterer's son-in-law, Julius von Schröckinger-Neudenburg, divided the journeys into ten segments. Natterer's own description of his itinerary can be seen in the fragment of a letter dated 1835.

His first expedition, from his arrival until November 1818, took him to the environs of Rio de Janeiro; the second, until March 1820, from the region west of the Captaincy of São Paulo to Ipanema; the third, from July 1820 to February 1821, from Ipanema to Curitiba and Paranaguá, and then by sea to Rio de Janeiro; the fourth, from February 1821 to September 1822, from Ipanema to uncharted parts of the provinces of São Paulo and Rio de Janeiro; the fifth, from October 1822 to January 1825, to Cuiabá and the province of Mato Grosso; the sixth, from January 1825 to July 1829, from Caiçara to Vila Bela Cidade de Mato Grosso and S. Vicente; the seventh, along the banks of the Guaporé and Madeira rivers to Vila Borba; the eighth, from June 1830 until early 1831, along the Amazon and Negro rivers to S. José de Marabitan, then down the Xié, Icana and Vaupé rivers to the falls, and back along the Rio Negro to Barcelos; the ninth, from August 1831 to 1834, across the province of Guyana along the Rio Branco to São Joaquim fort, on the border with French Guyana; finally, the tenth, in 1835, to the province of Pará.

Natterer complained that, for administrative reasons, it wasn't possible for him to visit the northeast of Brazil. This is the reason two scientists sent by Bavaria, Spix and Martius, were able to collect in this region before Natterer.

It was only in 1903 that ichthyologist Franz Steindachner (1834-1919), the last director of the Imperial Natural History Museum, managed to explore the areas of the northeast that Natterer hadn't visited. In requesting financing for this expedition from the Academy of Sciences, he presented precisely this circumstance.

Natterer considered himself a collector. Upon being urged to return, he repeatedly emphasized the importance of travelling to collect material to enrich the museum he served as an employee. He stated that the objective was to obtain the greatest number of objects and species, thus securing the Imperial Natural History Cabinet a leading position in relation to other museums, such as those in Munich and Berlin. The competitive angle was an attempt to ensure that treasures from the New World be first processed and presented in Vienna. Natterer shared this concept with his superiors, who thereby always authorized the extensions to his stay in Brazil.

Many people contributed to the vast collections that he gathered during his 18 years in Brazil, among them diplomats, merchants, local authorities, as well as slaves, servants etc. Natterer bought two slaves and from time to time rented others. Just like Mikan, he was accompanied by troopers and servants. He was given objects such as a crystal encrusted with a tree root by Colonel Vicente da Fonseca. He also exchanged animals with Indians for glass beads, especially birds. He took with him three air pressure pumps for the rifles, to shoot down birds, whose transportation required two mules. The advantage of this cumbersome equipment was they were silent, allowing for several successive shots and avoiding shooting smaller birds.

King vulture *Sarcoramphus popei*,
Murungaba, 30th March 1821;
Ara ararauna, Rio de Janeiro,
13th March 1821;
Tanagra seledon, 19th August 1818,
Scolopendra viridicornis, Rio Negro;
Freshwater crab *Dilocarcinus spinifer*,
Paraguay River;
Snails *Patella caerulea*;
Root-encrusted rock crystal, Mato Grosso;
Johann Natterer's Collection:
NHMW



Scientific results of Natterer's collections

In all, 12,293 samples of birds reached the Imperial Natural History Cabinet in 12 shipments. The size of the collection earned Natterer the nickname "prince of collectors", given him by ornithologist Philip Lutley Sclater.

In accordance with Schreibers' instructions, all animals shot were examined for intestinal worms, which he sent to Vienna separately in 1,729 recipients. He even went so far as to send a roundworm (*Ascarislumbricoides*) he himself had vomited up. He made detailed records of all observations of the animals being collected, sending his notes and drawings at regular intervals to Schreibers.

"1,146 mammals, 12,293 birds, 1,678 amphibians, 1,621 fish, 32,825 insects, 409 crustaceans, 951 shells, 73 molluscs, 1,729 recipients with intestinal worms, 192 craniums, 242 seeds, 138 wood samples, 430 minerals, 216 coins."

With over 1,800 items, the Natterer collection is the largest ethnographic collection in the Weltmuseum Wien. It is also the most important ethnographic indigenous collection from the early 19th century in the world. It includes vast archives from the Bororo, Sateré-Mawé, Tikuna, Tukano, Baniwa, Macuxi and Munduruku tribes, as well as rare feather handicrafts of the Parintintin, Karipuna and Apiaká.

Some live birds were taken to the Menagerie at the Schönbrunn palace; the other birds, turtles, marsupials, frogs etc., went to the gardens of the Burggarten park. Small animals spent the summer in cages on the terrace of the Imperial Natural History Cabinet, like the male skunk *Didelphys cancrivora* (Marsupial), sent by Natterer in 1819 and which lived until 1820. Sandler made three lithographs of this animal.

When Natterer returned to Vienna, in August 1836, the Brazilianum Museum was being disbanded, and this greatly disappointed him. He was appointed adjunct curator at the Natural History Cabinet. In this position, he examined the collections and began processing the rich compilation, above all the birds. To this end, he visited various museums and made contact with scientists, with whom he also exchanged material. A highlight among the many honours he received is the doctor *honoris causa* from the University of Heidelberg.

As Natterer didn't get the opportunity to process his entire collection – he himself only wrote two articles –, scientists from all over the world have used his notes and objects to describe Brazilian fauna. Various people have worked on the Natterer collections. A. v. Pelzeln and J. A. Wagner researched mammals; J. J. Temminck, J. Gould, E. A. Goeldi, Malherbe, A. A. Steubel, H. G. L. Reichenbach, F. H. O. Finsch, A. v. Pelzeln, H. Schlegel, P. L. Sclater and C. v. Schreibers investigated the birds; J. J. Heckel, R. Kner and F. Steindachner devoted themselves to the fish; V. Kollar worked with the insects; C. M. Diesing, with the intestinal worms; and L. Fitzinger and F. Siebenrock, the amphibians.

Natterer's name was eternalized in the denomination of various species of animals discovered by him.

The objects collected by Natterer can be admired in the exhibitions of the recently-inaugurated Weltmuseum Wien (previously Museum of Ethnography) in Vienna, while the animals he collected and stuffed are at the Naturhistorisches Museum Wien.

In the Weltmuseum Wien there is to this day a proof of sale dated 12th July 1820, issued in Natterer's name: "I today sell to Herr Johann Natterer, His Apostolic Majesty, on a permanent basis, my African slave José of the Congo nation, aged about 20, of small stature, for the sum of 300 thousand reis." In Cuiabá, Natterer bought another African slave, about whom he wrote to his brother: "He is a fine young lad of about 12 or 15 years old, from Mozambique. I intend to bring him with me, if he survives. I still have the other two!"⁵⁵

In his travel record of the region of the Amazon and Negro rivers, between 1848 and 1852, the famous English naturalist Alfred Russel Wallace mentions an old slave bought by Natterer in Rio and freed in 1835. Wallace hired this man – who in turn was now a slave owner himself – as a bird hunter in Pará. The man spoke of his activities with the "doctor", as he used to call Natterer, for whom he killed animals and helped with their conservation. For each stuffed bird, Natterer gave him a small gift.⁵⁶

The slaves José and Cândido, who belonged to Natterer, as well as his wife's slave, Laureana, also travelled to Europe. However because of the harsh climate they didn't want to stay, returning to Brazil in 1837.⁵⁷

Slavery was only abolished in Brazil in 1888. But contemporary scientists such as Humboldt had been opposed to slavery since the beginning of the 19th century, and in 1815 at the Congress of Vienna a declaration was published that the slave trade was to be abolished.

MICHAEL SANDLER
Didelphis cancrivora (Marsupialia
Beutelratte), colour lithograph, 1819.
This animal, of which Sandler made
three lithographs, lived until 1820.
NHMW

⁵⁵ Letter to brother (letter from Johann Natterer to Joseph Natterer), Cuiabá, 16th December 1824 / 18th February 1825, WStLB, HS, J.N.7882.

⁵⁶ See A. Russel Wallace, *A Narrative of Travels on the Amazon and Rio Negro, and Observations on the Climate, Geology and Natural History of the Amazon Valley* (London, New York, Melbourne 1889), 77 f u. 148

⁵⁷ Letter from Johann Natterer to Johann Neumann, Vienna, 18th December 1837 WStLB, HS, Natterer 7888, 10. Cf., Schmutzler (2011) 248



Uroplatus caninus Gm.
1819 von Gmelin eingesehen.
Sobald in S. Amerika des Naturam. - Cabinet.



JOHANN BAPTIST NATTERER
Side view, manguruiú catfish,
Pseudopimelodus zungaro.

Nº 17
Silurus
Cuiabá, 6th February 1824
Ma gwee
NHMW

JOHANN BAPTIST NATTERER
Side view, saddle cichlid,
Aequidens tetramerus
(Perciformes, Cichlidae)
D[orsal] 15/25, c[audal]/38, a[nal] 3/10,
v[entral] 1/6, p[ectoral] 14.
Nº 108, male.
Acara viridis new [species]
[Vila Bela do] Mato Grosso,
30th August 1828,
25th January 1829.
NHMW

JOHANN BAPTIST NATTERER
Side view, pike cichlid,
Crenicichla lepidota
(Perciformes, Cichlidae).
Nº 120
Crenicichla lepidota new [species]
[Vila Bela do] Mato Grosso,
February 1829.
NHMW



Johann Baptist Emanuel Pohl

In early 1817, Mikan suggested bringing a mineralogy specialist to join the team. Through the mediation of Count Franz Anton von Kolowrat-Liebsteinsky, the administrator of Prague castle, Johann B. Emanuel Pohl joined the mission team as mineralogist.

Pohl was born in 1782 in the town of Ceská Kamenice, in Bohemia. From the age of nine, he was raised by his uncle in Boletice and Labem. Soon the uncle, an amateur botanist, got his nephew interested in nature. Pohl excelled at secondary school in Prague and successfully finished his studies in medicine there too. During his time at university, he began his precious herbarium and wrote botany and mineralogy articles. Still a student, he was hired as librarian and inspector at Princess Kinsky's Natural History Cabinet.

In 1808 and 1809 he served as substitute during Mikan's absences from his lectures in botany and general and specialist natural history at the University of Prague. Following this, he was sent as a doctor to the imperial military field hospital in Náchod. The books he began writing, *Flora Pragensis* and *Flora Ruralis*, weren't finished due to his work in hospitals during the war. After the peace agreement, he published several volumes, among them: *Tentamen Flora Bohemiae* (Prague, 1814) and *Systematischer Überblick der Reihenfolge der einfachen Fossilien* [Systematic panorama of the sequence of simple fossils] (Prague, 1816).

After his return from Brazil in 1821, he was curator at the Mineralogy and Botany Natural Cabinet at the Brazilianum Museum. He was member of numerous scientific societies and associations. Already in 1807 he was made honorary member of the botanical society of Regensburg and, soon after, was named member of the Scientific Society of Altenburg. That same year, he became member of the Society of Science of Zurich for his article "Observations about the lifespan of certain amphibians", and the Society of Mineralogy of Jena, for his work on the *silimanite*.⁵⁸ Not long before his death in Vienna in 1834, he became a member of the famous German Academy of Sciences. He received the codename *Marcgravius*, an homage to Georg Markgraf (1610-1644). Also written "Marggraf", this was a German naturalist in South America who created a vast herbarium in Brazil, as well as producing notes in the fields of astronomy, meteorology, cartography and botany. The *Marcgravia* genus of plants was named after him by Charles Plumier and then taken on by Linné (not Pohl, as some publications claim⁵⁹).

Little is known about Pohl's family. His son Josef Pohl (1825-1900) became a chemist and taught chemical technology at the Polytechnic School (now the Technical University) in Vienna. He was one of the pioneers of photography in Austria.



JOHANN BAPTIST EMANUEL POHL
František Tkadlík,
Dr. J.[ohann] E.[manuel] Pohl,
lithograph, Vienna, 1823.
NHMW

⁵⁸ Cf. Wilhelm Rudolph Weilenweber,
Johann Emanuel Pohl. In: *Lotus 3*
(1853) 26
⁵⁹ E.g. ÖBL Vol.5.8 (1980) 154

Remuneration

Examining the remuneration authorized for the expedition members can be instructive. The artists received the lowest pay. The director of the expedition, Professor Mikan, commanded 12 florins a day. Dr. Pohl and Natterer received 9 florins each, giving rise to a complaint by Pohl, since Natterer was not an academic. In spite of his scientific education, Schott earned 6 florins, as did the two artists, Ender and Buchberger, and the hunter Sochor. The two draughtsmen also received an annual payment of 2,000 florins, since the other members of the expedition, with the exception of Pohl, continued to receive their salary. Sochor also received an additional 200 florins for his uniform.

Departure

The Austrian vessels *Austria* and *Augusta* sailed from Trieste on 9th April 1817. Aboard the *Austria* were Johann Christian Mikan and his wife, Thomas Enders, Spix and Martius. A few days before departure, on 20th March 1817, Mikan married Johanna Maria Woltech (née Woitrich), aged 35, in St. Stephen's Cathedral. During the crossing they didn't have the right to a cabin, just a hammock. Caroline Pichler, whom Johanna met in Prague in 1825, recalls in her *Denkwürdigkeiten aus meinem Leben* [Memorables from my Life]⁶⁰ that she had been in the Ural Mountains with her first husband, a Russian officer, and had some experience of expeditions.

Johann Natterer, Dominik Sochor and Heinrich Wilhelm Schott travelled in the *Augusta*. Sochor didn't have his own cabin and also had to make do with a hammock.

Already on 11th April the Austrian frigates were surprised by a violent storm in the Adriatic Sea and, suffering serious damage, were obliged to dock in Chioggia, near Venice. The *Austria* soon continued the voyage, while repairs to the *Augusta* required more time. The Imperial Navy was very poorly equipped. Instructions for the route had to be sent from Paris, there was only one chronometer available, and a sextant had to be borrowed from the personal property of a Navy captain.

“...Messrs. Pohl and Buchberger, however, having been named later, were in the company of Herr R. Schüch, ex-curator of the Imperial Natural History Cabinet and currently librarian in the direct service of Her Imperial Highness, the archduchess and princess, and of Herr Frick, in the same services as naturalist painter, aboard the committee of the Her Excellency the Archduchess, the bride, in the royal ships of the Portuguese line in the port of Livorno...”,⁶¹ Schreibers reported.

Also on board the royal Portuguese ship *São Sebastião*, which sailed from Livorno on 5th August 1817, were the princess's doctor and ornithologist, Dr. Johann Kammerlacher, the draughtsman and Rochus Schüch's assistant, Franz Josef Frühbeck, and the naturalist Joseph Raddi.

The *Augusta* reunited with the Portuguese vessels in Gibraltar. Metternich and Schreibers received the first reports about the scientists' investigations and collections during their stops on Pola, Gibraltar and Madeira. The Archduchess Leopoldina also made collections for her planned cabinet in Brazil.

⁶⁰ Pichler, *Denkwürdigkeiten*, 1914,
vol. 2, 203.

⁶¹ Schreibers, *Nachrichten*,
vol. 1 (1820), V-VI.

Arrival in Rio de Janeiro

The *Austria* already berthed in the port of Rio de Janeiro on 14th June 1817. Excited by the natural beauty, Mikan wrote: "The region is romantically beautiful, but also wild and impenetrable."

While awaiting the arrival of the others, Mikan began his collecting activities in the environs of Rio de Janeiro.

"The preparation and conservation require much more time and effort than the actual collecting. In order to protect the collected material from destruction by ants or, worse still, termites, it must be hung outside or a layer of pitch painted on the legs of the tables where the objects are placed, or they can be put in basins of water. A few days ago someone lost a whole case of clothes to the termites' voracity,"⁶²

he wrote to Karl von Schreibers on 15th August 1817. It had also been necessary to look for a place for the naturalists to stay, since no lodgings had been organized. Until the end of August, they lived on Rua da Alfândega, in the town centre. Then they moved to a "more agreeable and comfortable"⁶³ house in the neighbourhood of Catumbi, on the outskirts, but there too "thousands" of termites ran riot. The scientists were obliged to apply a layer of arsenic on the boxes of collected materials, then wash the floor with a tobacco solution.

Mikan made contact with Langsdorff, Eschwege and Major Feldner, who considered the parameters established based on the travel accounts by Mawe and Kosdter completely unrealistic. The furthest excursion made prior to the arrival of the other participants took Mikan to the Mandioca ranch, owned by Langsdorff, near Inhomirim (on the way to Petrópolis).

On 4th November the *Augusta* and the Portuguese fleet docked in Rio de Janeiro. The first excursions were undertaken that very day. In spite of all the animosity, a few days after Natterer's arrival, he wrote that Professor Mikan "has already collected many fine insects and various birds".⁶⁴

JOHANN CHRISTIAN MIKAN
Michael Sandler, from a watercolour
by Funk, *Oxyrhynchus serratus*,
hand-coloured lithograph,
printed by the Lithographic Institute
of Vienna, 1820.

NHMW

⁶² Schreibers, *Nachrichten von kaiserlich
österreichischen Naturforschern in
Brasilien und den Resultaten ihrer
Betriebsamkeit* (Brünn, 1820 and 1822)
1820, 68.

⁶³ Idem, 69.

⁶⁴ Letter from Johann Natterer to Karl von
Schreibers, 10/11/1817, ÖNB Autograph
collection 463/34-I não seria 11/10/1817 ??



Oxyrhynchus serratus

Journeys to the interior Brazil

Before proceeding with the undertaking, the scientists sought the advice of specialists already in Brazil for some time, such as Langsdorff. He warned them that, as a large group travelling together, they'd have difficulty finding enough lodging and supplies. Also, it made little sense for everyone to collect in the same places. According to Langsdorff, as well as their respective specialities, the naturalists could collect specimens in the fields of the other researchers.

An excursion of the whole group of researchers didn't seem purposeful, so they decided to divide the mission into three groups to explore Brazil along different routes. One route was planned north as far as Cabo Frio; another to the northeast, to Cantagalo; and a third journey to the south of Rio de Janeiro, to Ilha Grande. According to the instructions they'd received, plans must be submitted to the ambassador, Count Eltz. However, considering the estimated costs, the ambassador was reluctant to take responsibility for authorizing the researchers' proposal and decided to first ask the government in Austria, thereby losing valuable time. The naturalists were requested to be in Rio de Janeiro when the Austrian frigates departed in March, and this initially precluded other longer expeditions.

The expedition members divided into three groups: Spix and Martius, who didn't want to wait for the decision, broke off from the Austrians and travelled towards São Paulo in late 1817. The painter Thomas Ender joined them, but soon abandoned the expedition due to ill health and returned to Rio de Janeiro. "A physical and moral fatigue took hold of me to such an extent that I lay there, exhausted, unable to stand. A trip to the foothills of the Serra dos Órgãos, where I bathed in the cold river morning and night, animated me somewhat. But the climate was so pernicious that I was forced to leave the country",⁶⁵ he later recalled. The two Germans collected material in Brazil until 1820, crossing the provinces of São Paulo, Minas Gerais, Goiás, Bahia, Pernambuco, Piauí and Maranhão, reaching the border with Peru. They returned to Munich in December 1820 with a rich collection of material.

The other two groups set off in early 1818. Mikan, Schott and Buchberger went north of Rio de Janeiro, going up the coast to Cabo Frio and returning via Campos. Pohl, Natterer and Sochor's group were to go to Cantagalo.

⁶⁵ Ankwicz-Kleehoven, 28.

The expedition to Cabo Frio

Based on letters sent from Brazil to his brother-in-law Franz Berger, a professor of general natural history at the University of Prague, Mikan put together a description of the expedition (*Aus Brasilien. Küstenreise nach Cabofrio* [From Brazil. Journey along the coast to Cabo Frio]), which was only published in 1833, with additions, in the work *Kinder meiner Laune, ältere und jüngere, ernste und scherzhafte* [Children of my mood, old and young, earnest and jocular]. Income from the book went to the widows and orphaned children of cholera victims in Bohemia. However Mikan's brother-in-law would no longer be alive when he returned.

Mikan organized animals to ride and carry cargo. "I chose the most useful; especially for the botanical artist, Herr Buchberger, who had an unfounded fear of even the tamest of animals and had to be found an extremely calm horse",⁶⁶ he wrote to his brother-in-law in April 1818. Mikan's wife didn't wish to be left behind in Rio de Janeiro and joined the expedition, riding a small mule. "The Russian imperial consul-general Von Langsdorff, who helped me in all things with the kindest solicitude, found an animal for me",⁶⁷ wrote Mikan. The travellers had at their disposal "seven mules for riding, seven for carrying luggage and two extra, to carry the live plants we were to collect".⁶⁸ The researchers took cases for insects, tweezers, nets for catching butterflies, various sizes of pins specially made in Karlsbad (now Karlovy Vary in the Czech Republic), tin recipients for snakes and lizards, bottles of alcohol, three enormous bundles of paper that Mikan brought from Vienna to dry plants, a press for plants, card covers soaked in oil and lacquered, ropes, knives, arsenic soap to prepare hunted birds, hunting knives which could form a saw for cutting branches, cauldrons for cooking and tin plates, as well as a tent, mattresses, woollen blankets and linen sheets. All the equipment would be protected from the expected rains by leather coverings. To eat, biscuits, dried meat, live chickens, rum, wine, coffee, sugar, rice, eggs. The latter were conserved in manioc flour (*Jatropha Maihot* = *Jatropha manihot*), which they took to make bread.⁶⁹

The expedition's group was made up of Mikan, his wife, Schott, botanical artist Buchberger, the navy lieutenant from the imperial frigate *Austria*, Pastrovich, and servants. Pastrovich was a keen hunter and an excellent shot; but Mikan, as he himself wrote "was neither one nor the other", as well as having so much to do collecting and conserving plants, seeds, insects and reptiles.⁷⁰ Both the captain of the *Austria* and the Austrian ambassador authorized Pastrovich's participation. Thus Mikan managed to get birds which would later go to the Imperial Natural History Cabinet. The lieutenant also hired a seaman called Zacarias as a bodyguard.

Buchberger took along an English servant, Mikan a black slave and a German, and Pastrovich the seaman Zacarias. Schott had two assistants, an African and a mulatto, to dig up plants and carry them. The group also had an African to help collect and a German servant to serve and guard the goods. There was also a trooper responsible for taking care of driving the mules. "To dig up and transport the live plants, Herr Schott hired two assistants (an African and a mulatto)."⁷¹ Both the German and English servants rode on horseback, while the rest of the servants and the trooper went on foot.

⁶⁶ Mikan, 1833, 96.

⁶⁷ idem.

⁶⁸ Mikan, 1833, 97.

⁶⁹ Mikan, 1833, 104.

⁷⁰ Mikan, 1833, 97.

⁷¹ Mikan, 1833, 99.



Diplusodon virgatus.

MICHAEL SANDLER
Diplusodon microphyllus.
In: *Plantarum Brasiliæ icones et
descriptiones hactenus ineditæ*, volume 1,
hand-coloured lithograph,
Vienna, 1827.
NHMW

MICHAEL SANDLER
From a watercolour by Funk,
Morpho Reinwardti,
hand-coloured lithograph, printed
by the Lithographic Institute of
Vienna, 1820.
NHMW



Morpho Reinwardti

Hand-coloured lithograph

Hand-coloured lithograph

The consul-general Langsdorff taught Mikan's wife to eviscerate birds and soon claimed that his disciple's skills were now better than his own. She also helped her husband conserve the plants collected and to collect insects. Also, during the journeys, she prepared meals for the whole group. The contribution of Mikan's wife to the results of the expedition was highlighted by Arnold von Oken in the specialist science journal *Isis*.⁷²

Before long, a poodle and a capuchin monkey joined the group. Mikan's wife adopted a little orphan monkey, after the mother had been killed by a hunter. "As she rode, the little monkey embraced her neck, protected from the hot sun of the South and from the rain by the wide brim of her hat."⁷³ The monkey died three years later, after the return to Vienna, where it took part in nearly all the Mikan family's social events.

Often the jungle was so dense that the group took some time to find the hunted birds after they fell from the trees. While they searched, Buchberger drew "the most unusual plants" and the rest of the group hunted for more birds.⁷⁴

"The continuation of our journey began with the need to head to Geitado, across the lake. We travellers and our luggage filled several boats, and some sat holding the reins of the their mules, which swam across; on the far side, the pack animals were again loaded or mounted. Then the path lead through bushes and low undergrowth, the numerous bends preventing us from seeing the path ahead, and by chance the group got separated."⁷⁵ In the darkness of the bush, Mikan suggested everyone shout out each other's names, so as not to lose anyone. The darkness was such that one could only be guided by the trooper's white suit and hat. The mules often lost their loads, but also the riders. Mikan too fell from his mule once, but without injury, unlike the painter Buchberger.

On the morning of 2nd March they left Geitado for Parati, arriving in Cabo Frio the next day. Mikan was the last in the group. Schott came running to him: "Buchberger has had an accident. No one knows whether he'll make it!"⁷⁶ Mikan's wife tended to the wound.

JOHANN BAPTIST EMANUEL POHL
Antonia ovata POHL, from the
Antoniaceae family, collected by Pohl
in the district of Rio de Janeiro.
The genus was named by Pohl in
honor of Archduke Anton Victor,
the emperor's brother.
NHMW

⁷² *Isis or Encyclopädische Zeitung* by Lorenz Oken (1823) Supplement no. 9. *The Brazilianum Museum in Vienna*.

⁷³ Mikan, 1833, 102.

⁷⁴ Mikan, 1833, 122.

⁷⁵ Mikan, 1833, 142-143.

⁷⁶ Mikan, 1833, 159.

NATURHISTORISCHES
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JOHANN BAPTIST EMANUEL POHL
Franciscea uniflora (POHL) collected
by Pohl near Rio de Janeiro.
The genus was named by Pohl in
honor of Emperor Francis I (II)
(= today *Brunfelsia uniflora*).
NHMW

JOHANN BAPTIST EMANUEL POHL
Michael Sandler, *Franciscea uniflora*.
In: *Plantarum Brasiliæicones et
descriptio[n]es hactenus ineditæ*, volume 1,
hand-colored lithograph, Vienna, 1827.
NHMW



Franciscea uniflora.

Illustration and text taken from a digital document.

The next day, Mikan sent a report to the ambassador:

"Yesterday a sad accident delayed the progress of our journey. Herr Buchberger fell backwards from an unruly mule, and fell in a highly unfortunate way on a vertical piece of wood among the bushes, which entered six inches into his body through his rectum. Before anyone could do anything in answer to his cries of pain, he himself removed the piece of wood and held it in his clenched fist, and was thus more carried than lead, all bloody, pale with pain and fear and almost fainting, to a store we had just passed. There I ordered the wound be cleaned with warm water and a little wine; then the injured man was carried on a stretcher back to our local lodgings. We discovered that 3 leagues away lived a skilled healing doctor who was well equipped with surgical instruments. We immediately sent a messenger on horse, who returned that evening with the doctor... Bathing, injections and bandages were necessary, and in the morning the injured man's blood was let, his pulse being high, to prevent infection and burns. Although this help brought some relief, the normal flow of urine is inhibited and, having accumulated in the bladder, finds a path through the wound, though not without difficulty. This indicates an injury not to the bladder, but the urethra, which rather complicates Herr Buchberger's condition. May the heavens allow, as in many such cases, nature to express its often miraculous curative powers!"⁷⁷

JOHANN BUCHBERGER
Campanula cervicaria,
watercolour, before 1817.
NHMW

Buchberger was taken to Rio via difficult treks over ten days. The group arrived on 16th March 1816. The painter started to be treated by Johann Kammerlacher,⁷⁸ Leopoldina's private surgeon. After his return to Vienna, Kammerlacher became the court surgeon and, from 1833, the Emperor's personal doctor.

After an initial improvement, Buchberger's state worsened so much that he had to return home.

The five-week expedition began in Rio de Janeiro and took a route along the coast, via Praia Grande, Perteninga, Tocaia, Buraco Ponte Negra, Sagereme, to Geitado. Despite all the problems and great effort required, Mikan showed his great enthusiasm for Brazilian nature in his letters.

"Anyone with any aesthetic emotion for nature's beauty cannot but be overwhelmed by a very special feeling in penetrating a Brazilian forest, where not a single tree has been the victim of the work of man, where all stand just where they always did, like columns supporting the high dome of nature's evergreen temple."⁷⁹

And:

"How immensely attractive to naturalists are these wild and beautiful regions! Everywhere, a *pléiade* of shapes of the most diverse and surprising plants, which never suffer frost in the winter, and the most colourful of birds and marvellous of butterflies."⁸⁰

⁷⁷ Letter from Mikan to Eltz, Geitado 3/3/1818, HHStA, St. K. *Brasilien*, K. 2, fascicle 4

⁷⁸ Kammerlacher was not the legation doctor, as Schreibers states in *Österr. Naturforscher* (1820) 104. The legation doctor was Prataschewitz cf. Mikan (1833) 168. Kammerlacher wrote: *Heilung der Beinbrüche* (Vienna 1835), *Bruchstücke aus dem Gebiete der Chirurgie* (Vienna, 1842). He was a Knight of the Royal Military Order of the Our Lady of Conception. In 1817, he was hired as personal doctor to Leopoldina with a salary of 3,000 florins in silver coins.

⁷⁹ Mikan, 1833, 131.

⁸⁰ Schreibers, *Nachrichten* vol. 1 (1820), 67.



Campanula cervicaria?

Pohl's journey to the interior of Brazil

In early 1817, Mikan complained about the lack of a specialist in mineralogy. Through the mediation of administrator of Prague castle, the Bohemian count Franz Anton von Kolowrat-Liebsteinský, Johann Baptist Emanuel Pohl joined the expedition team as mineralogist. He himself only received official orders on 4th May. The next day, he wrote to the local authorities that he would only be able to leave on the 11th or 12th of that month, at best, since he needed to make some travel preparations and wrap and leave his valuable collection of minerals somewhere safe, as well as his library.⁸¹ In mid-May, he would leave for Vienna, and from there travel to Livorno.

Pohl made use of the remaining time until his departure on 5th August 1817 to visit scientific institutions in Florence and to prepare for the expedition.⁸² He didn't obtain permission to undertake other expeditions, such as a trip to the island of Elba.

Of the crossing, Pohl wrote that two children were born on board the *João VI* and the *São Sebastião*,⁸³ before arriving in Rio de Janeiro on 4th November 1817. Mikan put up Pohl, Raddi and Buchberger until they could find accommodation.⁸⁴

The group made up of Pohl, Natterer and Sochor, which was to travel to Cantagalo, was split up. Pohl explored the areas near Rio de Janeiro and Ilha Grande, while Natterer and Sochor headed for Santa Cruz and Sepetiba by sea. Pohl, a European servant and a trooper went by mule. Two Indians hired at great expense went on foot, leading three mules with luggage.⁸⁵

On the way, Pohl had a very disagreeable experience:

"I'll never forget that day! I consider it one of the most difficult and fertile of my life. The first inconvenience was to have taken the wrong path soon after we left. An old bridge collapsed when one of our mules crossed it, which delayed us for over an hour. Finally, everything was resolved and we continued on our way. ... We settled down to the pleasant expectation of a happy journey, but were soon disappointed in such a way that we were almost forced to give up. Before us stood the Serra de Angra, tall mountains completely covered by dense jungle... We would have to climb the mountains. The path was extremely difficult. We climbed, passing craggy rocks with riverbeds dug out by the rains... The strong branches and bushes made our passage even more difficult. On that terrible path the mules were not safe. However we managed to overcome all difficulties, reaching the summit around midday... The great incline down which we had to descend was extreme and treacherous. The trail was very steep and soon became so dangerous that we dismounted our animals so as not to be thrown in the steep bends. The mules fell, one after another, and we faced an increasing and almost unbearable number of obstacles. After also crossing several swamps, we finally reached the guardhouse, exhausted from the monstrous effort ... Again we crossed swamps for two hours, with our poor tired animals wading up to their chests... once I was even trapped by branches hanging around my neck, while my animal sank into a hole. Only my servants' agility saved me from that dangerous situation."⁸⁶

⁸¹ HHStA ISt.-K Brasilien. Letter from Pohl to the Imperial National Council (k.k. *Nationalpräsidium*) on 5th May 1817: "My domestic matters – the acquisition of the most fundamental necessities, the wrapping and safekeeping of my considerable of minerals, the herbarium and the library, even with every determination and effort, require that my departure date be on 11th or 12th of this month." He was only officially informed about the journey to Brazil on 4th May, before that he had only heard rumours about his participation.

⁸² Cf. *Vaterländisch. Blätter* 17 (28/2/1818), 66.

⁸³ Pohl, *Reisen* v. 1,224-25.

⁸⁴ Idem, 33.

⁸⁵ Idem, 126.

⁸⁶ Pohl, *Reisen* [Travels], v 1, 149-151, published by Christa Riedl-Dorn, *Haus der Wunder*, 106-107

On 24th February 1818, Pohl rejoined Natterer in Sepetiba, where the zoologist had arranged lodging for him and where all the insects collected thus far were devoured by ants.⁸⁷ Originally, Natterer was to have accompanied him to Angra dos Reis, but in the end decided not to. Pohl handed over his collections to Natterer and continued his journey on 5th March towards São João Marcos.⁸⁸

So Pohl returned to Rio de Janeiro in early April, while Natterer arrived on 7th May by a different route. There, all collections were wrapped ready to be transported on 1st June to Europe on the imperial frigates *Austria* and *Augusta*.

After Mikan's departure, Pohl also assumed the task of collecting botanical material. His experiences were similar to the mission's former director.

"However much encouragement we get in finding new items, this joy soon cools when we are unable to dry the paper and plants; when the humid air forms mould and fungus and everything that has been conquered with such great effort needs to be thrown away. Or when, from one moment to the next, termites appear, even indoors, announcing a war of destruction the only escape from which is to flee; yes, even in larger towns the treasure must be guarded day and night, for weeks on end, until one can gather enough boards and nails to put together some cases to pack them in."

Pohl, Natterer and Sochor, who briefly considered returning to Austria with Mikan, drew up the travel plans. The idea was to travel to the province of Goiás via different routes and re-unite in the province capital Vila Boa (Goiás). Then Pohl intended to visit the province of Minas Gerais, rich in minerals, starting with Vila Rica (now Ouro Preto).

These plans needed to be presented to the ambassador, and there were major administrative obstacles to be overcome before embarking on the expedition. Initially, the Austrians had only had passports issued for the province of Rio de Janeiro, and not the whole of Brazil. Hence new authorization requests were now made and had to be examined by the authorities. Permission for foreigners to travel to the gold and diamond mines in the interior of Minas Gerais was only granted with considerable hesitation. In his travel accounts, Pohl indicates the reason: "The reason for this clause was a jocular comment made by the member of a foreign delegation who wanted to visit Minas Gerais, declaring more than once that he had no intention of returning home without a bag of diamonds."⁸⁹ Pohl got permission to visit the regions he had chosen, with the exception of the district of Diamantino.

The scientists received new instructions from the legation: every month they were to send the embassy short accounts and, after a few months, general reports. Furthermore, they should make numerous copies of the collection lists. Everything that might be of interest beyond the field of natural sciences should also be recorded.

⁸⁷ Idem, 134.

⁸⁸ Idem, 136.

⁸⁹ Pohl *Reisen*, v. 1, 175.





LUKAS BETZIC

Routes travelled, Map of Brazil showing
the journeys undertaken by imperial
naturalists Dr. Pohl and Johann Natterer,
hand-coloured lithograph.
Pohl's route is marked in blue.

NHMW

From POHL
Rock Crystal, Serra dos Cristals,
Minas Gerais;
Kyanite, Serra da Conceição,
Minas Gerais;
Itacolumite (Megaponte, Goiás);
Wooden box with topaz ore from
Rio dos Americanos, Minas Gerais.
NHMW

On 8th September, Pohl began the second expedition, taking him to the provinces of Goiás and Minas Gerais. He collected in regions which no European had explored before.

In mid-October he reached São João del Rei, where he visited the mines. Although he was advised to return to Rio de Janeiro because of the approaching rainy season, he continued his journey to Vila de Paracatu do Príncipe. On 22nd January 1819 he reached the province Goiás. Due to the rains, he was obliged to spend three months there, broken only by a short excursion from 6th to 21st February, to Rio Claro. Pohl had his first closer contact with Indians, of the southern Kayapó tribe in São José de Mossamedes, in south-eastern Goiás. Pohl was only able to continue his journey to the southern regions of the province on 22nd April 1819.

Gravely ill, he travelled along the Maranhão river for three weeks. He returned to Porto Real, and from there to Vila Boa, where he arrived in January 1820. The rainy season and his fits of fever hindered his departure for the province of Minas Gerais. Passing the Jequitinhonha river, near which he encountered Botocudo Indians, and Vila de Fanado, he arrived in Vila Rica on 6th December 1820. He spent several weeks in the town, due to illness, before arriving back in Rio de Janeiro on 28th February 1821 with large collections. He had sent several cases to Rio during the expedition, being helped by Eschwege, among others. Heavy minerals and rock samples were often transported by ship.

Pohl had already sent a request to the Emperor during the expedition, asking to return home for health reasons. Then, a few days before his arrival in Rio there was a violent revolt. The naturalists were asked to interrupt their travels and return to Europe.

Accompanied by his personal servant, three animal handlers and the gardener's assistant Schücht, Pohl embarked on the journey home on 15th April 1821 aboard the English vessel *Northumbria*.

In the account of his travels, Pohl narrated the difficulties he endured. The collections weren't only threatened by insects; in several places, he describes problems with the pack animals for riders and cargo. Mules and troopers had to be organized. The animals dropped cargo on the ground and bottles broke, packets and cases split, and the barometer broke; rearranging cargo was time-consuming, they had to catch any mules that fled for lack of decent pasture, all of which interrupted the journey. In the Serra d'Angra region while negotiating a narrow trail they had to lead the animals so they wouldn't fall in the steep bends. The animals didn't always find firm ground on which to tread. Passing across swamps, they would sink in up to their chests. They were often obliged to turn back because rivers and streams were flooded from the rains, and animals sank or fell. Broken saddles hurt the animals and had to be repaired. The collections were destroyed by termites or ants several times, or by the humidity. Mosquitoes prevented them from sleeping.

On the other hand, the collections were also in danger from the humans themselves. In one dangerous fall by a servant, Pohl's barometer and safety tubes broke.

In Arraial Nossa Senhora da Oliveira, a beggar threatened to kill Pohl's monkey if he wasn't given a hand-out.⁹⁰ Two of his servants didn't want to continue the journey at Vila Barbacena.⁹¹ Finding no substitutes, Pohl had a lot of work in convincing them to continue.

Pohl was shocked by the ill treatment of slaves and often recorded the exaggerated punishments and repulsive methods they were subjected to.

One time, an African slave who had killed a master who had tortured him, was decapitated and his hands cut off. The head was displayed on a hill on a long spike.⁹² Another time, he noticed "thousands of flies" in a store, until he realized they were the consequence of a head and hands on public display.⁹³

Unlike Natterer, Pohl criticized slavery, as can be surmised from this narrative:

"...we were delighted by a fine view across Ribeirão do Alberto Dias, located in a valley, and to the south, of the church at Villa Barbacena... There we came across a large group of black slaves who had been purchased in Rio de Janeiro and brought to the interior. There were some thirty of them, between the ages of 10 and 13. This caravan was a truly sad spectacle. Their aspect was frail, starving and thin; these poor, lamentable creatures, unaccustomed to such walks, dragged themselves with great effort... Several were unable to go on and leaned on wooden sticks, limping, advancing slower than the stronger among them. Their owner brought up the rear on horseback, with a freed slave, and behind each was a sick African on horseback. Another rather paralytic man limped along as best he could, clutching the tail of the horse."⁹⁴

Pohl also revealed his sympathy for Indians such as the Kayapó, who were already no longer able to live by hunting and fishing, according to their tradition, but were forced to work in plantations.⁹⁵ He recognized the misery, the consequences of their sufferings under white people, and spared no criticisms.

⁹⁰ Pohl, *Reisen*, v. 1, 226.

⁹¹ Idem, 602.

⁹² Pohl, *Reisen*, v. 2, 580.

⁹³ Idem, 206.

⁹⁴ Idem (1837), 601.

⁹⁵ Idem (1832), 399-400.

"The vessel, carrying almost 1,600 live plants, in 63 large containers with earth, over 260 live animals of all species and 57 cases packed with natural products, left the port of Rio de Janeiro on 16th April, but its reserve of drinking water soured so unusually quickly, affecting the life and health of various plants and animals, that the captain found himself forced to stop off in the Brazilian port in Bahia. There they found what they were looking for with such urgency, but then a most undesirable calm began which, together with unfavourable currents, extended the crossing to Europe to an unusually long period of 109 days. It was only on 2nd August that the ship entered the port of Amsterdam."⁹⁶

All the cargo was put on a Rhine vessel and taken to Mainz, and from there continued by river to Würzburg. There, greenhouses were made available so the more sensitive plants could spend the winter under the supervision of gardener Schücht. Pohl took the remaining treasure to Regensburg, and from there to Vienna, also by river.

On 16th October 1821, the journal *Wiener Zeitschrift für Kunst, Literatur, Theater und Mode* [Viennese Magazine for Art, Literature, Theatre and Fashion] announced:

"Herr Dr. Pohl returned content yesterday afternoon with a respectable shipment of Brazilian rarities. From Amsterdam, where he docked, he took everything by river to Würzburg, where he left the live plants, having suffered from the long sea crossing of 109 days and no longer transportable without risk because of the unexpected cold, taking the rest overland to Regensburg and from there on the Danube. Among other things, he brought two Botocudo Indians, a man and a woman, and their child. Among the natural rarities are a crocodile! an armadillo or tatu, a cassowary (bird), a king vulture, etc. A more detailed announcement of these most interesting treasures will be published in the next edition of this journal."⁹⁷



96 *Isis von Oken* 1823, 2 volumes. Book VII-XII Hier VII (Jena 1823) 724.

97 *Wiener Zeitschrift für Kunst, Literatur, Theater und Mode*. Thursday, 18th October 1821, n.125, 1064.

“Botocudos” in Viena

Sling for carrying children

Krahô, Eastern Brazil, around 1821.

Vegetal fibre, animal claws, seeds, resin, ca. 86 cm.

Pohl Collection.

About this item, Pohl writes: “On 12th August we made good progress along the river and soon came to São Pedro d’Alcântara. Already from a distance we could see a large crowd of Krahô gathered on the banks, as well as soldiers who had taken up position [...] The Krahô were completely naked, armed with bows and arrows, painted red with annatto, and their faces partially painted black. Only the “captain” wore blue trousers of vegetal twine, a shirt and nightcap. [...] I was also able to acquire one of the slings for carrying children mentioned above, which I found all the women there using; the owner wouldn’t part with it until ensign Morreira [Moreira] gave her a piece of tobacco roll as a gift.” (JEP)

Weltmuseum Wien

The “Botocudos” attracted a lot of attention in Vienna. The Austrian ambassador had obtained authorization for Pohl to take these two Indians to Austria. They’d been selected among 50 Indians brought to Rio de Janeiro as “proof of a civilization in progress”, to be presented to the king.

Soon the first engraved portraits by Karl von Saar appeared in a supplement *Die Botocuden-Indier in Wien* [The Botocudo Indians in Vienna] for subscribers to the journal *Wiener Zeitschrift für Kunst, Literatur, Theater und Mode*.⁹⁸

“The Botocudo Indians in Vienna, brought from Brazil by naturalist researcher Herr Dr. Pohl. These two individuals, a man and a woman, called João and Francisca, belong to original tribes in Brazil inhabiting the banks of the Jequitinhonha river in the captaincy of Minas Gerais, which flows into the sea at Vila Belmonte.”⁹⁹

And in the article “Curiosities of Brazilian Nature in Vienna”, the journal informed the Viennese that:

“Among these inhabitants of South America, which are usually caught by Portuguese planters or taken in, whenever they seek shelter voluntarily, is the couple which Dr. Pohl has happily brought to Europe and who came of their own free will. Except for a brief stay among Portuguese planters, whose language they understand a few words, both – the man aged 20 and the woman aged 21 – came directly from the hands of nature, as it were, to a refined people. Their tribal characteristics are far more marked than the young “Botocudos” that Prince Neuwied brought back and the two other South Americans that Bavarian scholars removed from their homes to Europe...”¹⁰⁰

The “Botocudos” were briefly on public display in 1821 in the park at Burggarten.¹⁰¹ That same year, they could also be seen as waxworks in the Natural Cabinet of Johann Georg Dubsky von Wittenau, in the Prater amusement park, in Vienna.

Both “Botocudos” lived in the imperial court and studied gardening. They were frequently invited as an attraction to social events such as evening balls. While Francisca enjoyed dancing and talking to people, João was reclusive and silent. He soon developed a passion for beer. As João mistreated Francisca, each was given their own apartment. Following an amorous relationship with a soldier, she gave birth to a son, who died soon after. Francisca requested permission from the Emperor to return to her country, but died of pneumonia during the preparations for her return, on 23rd October 1823. João returned to his family in Brazil in November 1823. The Emperor requested precise information about his journey back.

The child mentioned in the journal of 16th October 1821, a daughter, came into the world in Mainz. She was baptized in Vienna and was named Barbara, but died a few days later.

In 1824, the journal *Allgemeine Theaterzeitung und Unterhaltungsblatt für Freunde der Kunst, Literatur und des geselligen Lebens* published news of what became of the “Botocudos” in Vienna.¹⁰²

98 Idem 138. Saturday, 17th November 1821) 1167-1168.

99 Idem 145, (1821), 1167.

100 Idem 145, (1821), 1219.

101 Mauthe, *Brasilienexpedition* (1994), 20.

102 *Allgemeine Theaterzeitung und*

Unterhaltungsblatt für Freunde der Kunst,

Literatur und des geselligen Lebens 11

(24th January 1824) 41-42.

Scientific results of Pohl's collections

Pohl didn't collect all the minerals, animals and plants himself. He got many items through exchanges or by purchasing them. For example, with the "Botocudos" he exchanged his knife for a bow and arrow¹⁰³ and ear adornments for salt and tobacco.¹⁰⁴ In the region of what was Arraial S. Antonio do Descoberto dos Montes Claros, he acquired a pair of boots made of the hide of a giant snake, fished from the Montes Claros river.¹⁰⁵ In the region of Aldeia Cocal Grande, on the banks of the Rio Maranhão river and with great effort, Pohl succeeded in exchanging an Indian ceremonial machete for several knives.¹⁰⁶ During the journey to Boa Vista, Pohl saw topaz mines. With a view to buying a large topaz crystal for the Emperor, Pohl sought out the owner of the mine, who showed him some fine samples, but only wanted to sell the unattractive ones, so in the end no purchase was made.¹⁰⁷

The Austrian expedition also appeared in the Brazilian press, which resulted in invitations which greatly assisted Pohl, such as one from a priest.¹⁰⁸ He also acquired animals from other parts, such as prosimians from Africa.

Six birds and 13 mammals died on the journey home. Pohl eviscerated the animals himself, among them a puma (*Felis concolor*), a jaguar (*Felis Onca*), two *Felis brasiliensis*, two otters (*Lutra brasiliensis*), a boar (*Sus Tayassu*), an *Antilope tragocamelus*, four capuchin monkeys (*Simia cephatus*, *simia sabaea* = *Chlorocebus sabaeus*, *simia capucina* = *Cebus capucinus*), a *Simia cephatus* from the Old World and a lemur (*Lemur nigrifrons*) from Madagascar.¹⁰⁹

Pohl's collections, which arrived in four shipments, included: "6 mammals, 22 birds, 22 amphibians, 49 fish, 2,124 insects, 200 shells, 10 species of the radiata family, 4 intestinal worms, 115 arms and equipment, 110 seeds, 31,746 plants and 4,464 minerals."¹¹⁰

At Metternich's request, the German anatomist and anthropologist Johann Friedrich Blumenbach had sent a list of desired objects, dated 7/12/1816. It begins with a series of statistical and anthropological questions about the population of Brazil and requests, if possible, the cranium of an original inhabitant and, in the field of zoology, animal craniums conserved in alcohol for research about the brain and insects. Blumenbach also requested that the scientists look out for fossilized animals, mainly monoid and belemnite molluscs, Humboldt not having found specimens in the regions he explored. He was also interested in 24-carat gold and hoped to reach geological conclusions about minerals. Finally, he requested books for the university library at Göttingen. Pohl was appointed to answer Blumenbach's list of questions, but was only able to do this following his return, because due to an oversight the list never reached him before his departure. In 1822, Blumenbach expressed thanks for the "highly instructive answers by the excellent Herr Dr. Pohl...", transmitted to him by the Austrian legation in Hannover.¹¹¹

¹⁰³ Pohl, *Reisen*, v. 2 (1837), 455.

¹⁰⁴ Idem, v. 2 (1837), 449.

¹⁰⁵ Idem v.1 (1832), 285-286.

¹⁰⁶ Idem v. 2 (1837), 195.

¹⁰⁷ Idem v. 2 (1837), 590.

¹⁰⁸ Idem v.1 (1832), 278.

¹⁰⁹ AfW NHMW Brasilianum IV shipment

Vögel und Säugetiere welche Hr Dr. Pohl während der Reise gestorben sind und von demselben abgebalget wurden. Erhalten 8. Oktober 1821 [Birds and mammals which died during the journey of Herr Dr. Pohl and which he stuffed.

Received 8th October 1821]

¹¹⁰ Archiv, NHMW, Tabellarisch-summarische Uebersicht...Akten: Brasilianisches Museum, Wien.

¹¹¹ Abgedruckt bei Kadletz-Schöffel, 219.

Scientific books

Pohl eternalized his experiences in brilliant style in the book *Reise im Innern von Brasilien* [Travels into the Interior of Brazil], in which the strictly scientific results – of interest to just a small circle of specialists – are presented separately from descriptions for the general public of the country and inhabitants. The account of the journey is particularly valuable in the diversity of sociological and ethnographic observations, an important source to this day for Brazilian historians and ethnologists wanting to find out about the structure of Brazilian society at the time.¹¹² The Caiapó and Xavante language samples are also valuable.

Before being printed, financial resources would have to be raised to pay for the publication. In 1823, Metternich wrote a report for the Emperor about the work describing Pohl's travels.

It wasn't until late 1825 that the Emperor chose Chancellor Metternich-Winneburg to select the illustrations and supervise the production of copperplates for the book. Count Kaspar von Sternberg was appointed by the Emperor to edit the work.¹¹³ The censor Gentz, himself a lover of flowers who had greatly enjoyed Pohl's deluxe botany publication *Plantarum Brasiliæ...*, didn't approve of the style of Pohl's text. Therefore the first part of the description of the journey, dedicated to Empress Caroline Augusta of Austria, wasn't published until 1832.

Among the various drawings, some of them just sketches, Metternich chose those which, in his view, best portrayed the country. Engravers Axmann and Passini produced the copperplates.

Since Ender had produced just 786 watercolours before returning home, Pohl himself felt obliged to produce drawings. He recorded the tropical world with the help of a Wollaston camera lucida, an optical device used as a drawing aid by artists. Thomas Ender made several drawings based on these images.¹¹⁴ He also envisaged drawings by Ender of ethnographic objects, for publication in the second volume.

But again, financial resources were lacking. In January 1834 a request was made to the Emperor for an advance. Pohl died four months later. The second volume was only published in 1837, based on the diary in Pohl's archives, thanks to appeals by Sternberg and Metternich to the Emperor's doctor, Stift (1760-1836), and Emperor Francis I (II), as well as his son Ferdinand (1793-1875). Meanwhile, accounts of the expedition by Spix and Martius were published in 1828 and 1831, with the generous financial support of King Maximilian I Joseph and his successor Ludwig I of Bavaria (1786-1868).

Paul Partsch wrote the “geognostic and mineralogical annex to the second volume”, which ran nearly 30 pages.

¹¹² Riedl-Dorn, 1998, *Haus der Wunder*, 111.

¹¹³.

¹¹³ Pohl, *Reisen* [Travels], v.1, (1832) XIII

¹¹⁴ Idem, v.1 (1832), Clarifications.



Botocudo Indians, in: supplement of the magazine *Wiener Zeitschrift* 138/1821, engraving by Carl Rahl from drawings by Carl von Saar, Vienna, 1821.
NHMW

Boar skin boots, before 1820.
Acquired by Pohl in the region of Santa Luzia, Goiás.
Pohl collection
Weltmuseum Wien

Ceremonial axe, Porecramecan, Cocal Grande, acquired by Pohl, Maranhão River, before 1819.
Pohl collection
Weltmuseum Wien



Warrior's club, knee band for dancing
and carrying basket

Southern Kayapó, region of the source of
the Araguaia river, Brazil, around 1820.

Wood, horn, bamboo, palm leaf, palm
leaf strips, feather calamus, animal claws,
raffia twine, ca. max. 97.5 cm.

Pohl collection

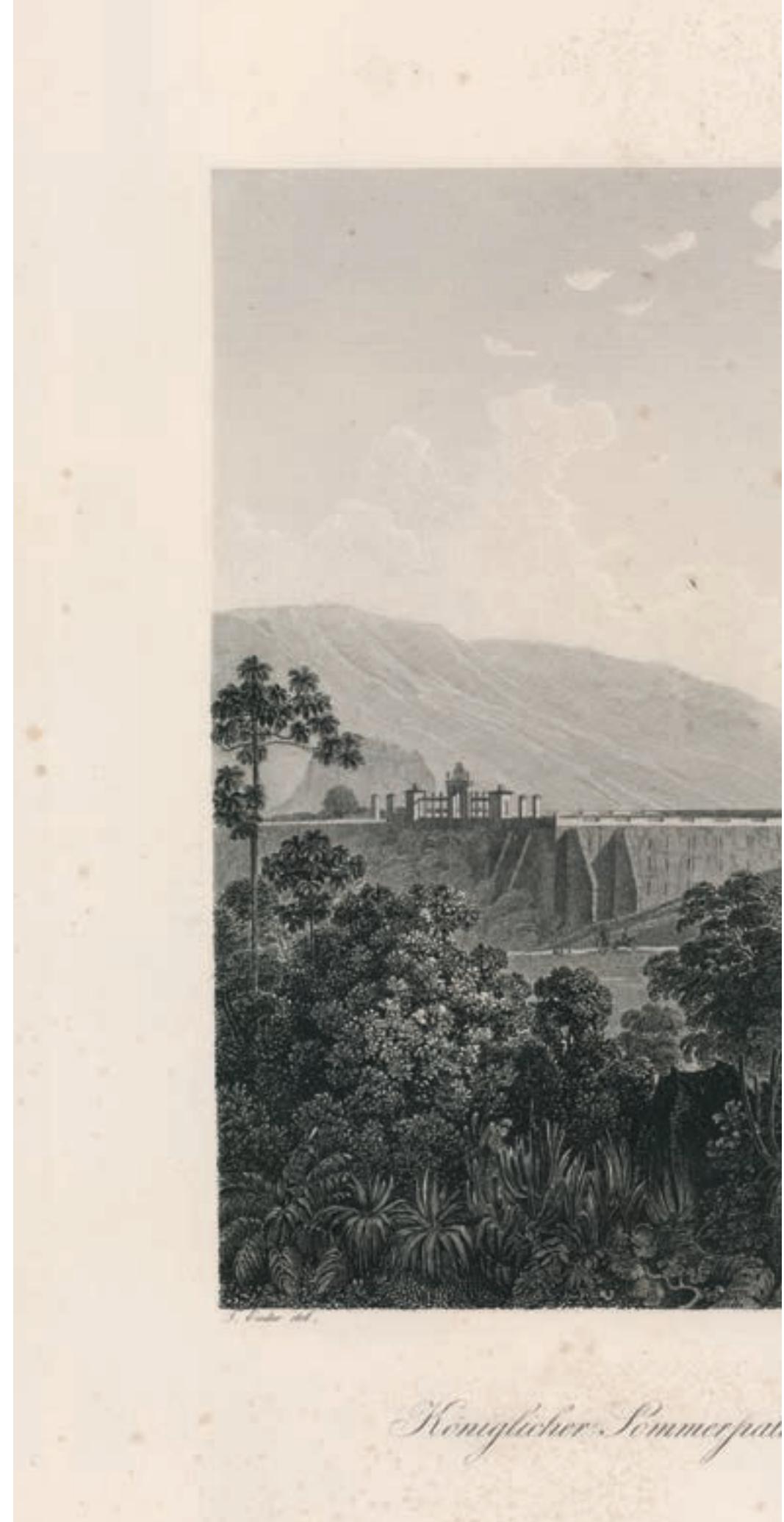
The southern Kayapó were the first
indigenous group with which Johann
Emanuel Pohl came into contact. He
collected 31 objects from them and in his
travel account gave detailed descriptions
of their use and how he came by each one.
The account also gives an amazing portrait
of the precarious conditions of life in the
village, describing the traditional way of
life of the forest Indians as a "savage state".
According to Pohl's account, it became
more and more difficult to convince the
Kayapó to accept life in the village, many
of them fleeing it again after a short time.
Hence diseases would also spread to
distant regions and certainly contributed
to some groups choosing to avoid any
contact whatsoever, as a strategy for
survival. (CA)

Weltmuseum Wien





Royal Palace Quinta da Boa Vista,
imperial family residence,
S. Christóvão, near Rio de Janeiro.
Copperplate engraving by Passini, n.d.
NHMW



Königlicher Sommerpal



J. Lepicius sculp.

palast, *Bea vista*, bey S. Christovão, in der Nähe von Rio de Janeiro

POHL, Johann Baptist Emanuel

Plantae Brasiliæ icones et descriptiones hactenus ineditæ

Two thick volumes, marvellously illustrated by Michael Sandler (1790-1850), summarize Pohl's scientific results in the field of botany.

The artist Michael Sandler specialized in flora and won the Gundel Prize from the Academy of Fine Arts in 1807 and 1809. He was married to Magdalena Schubert, cousin of the famous composer Franz Schubert. Endlicher advised against the continuation of Sandler's work illustrating Brazilian plants, considering "the accumulation of such images void of soul or life to be just an expensive and useless burden".¹¹⁵

Pohl named a series of plant species he'd discovered after members of the imperial family; the species *Franciscea*¹¹⁶ of the Solanaceae family is an homage to the Emperor Francis I (II.); *Augusta*, a species of coffee, to the Emperor's fourth wife; *Ferdinandusa*, also a genus of coffee, to the Crown Prince Ferdinand; *Antonia*, *Antoniaceae* in the modern system of representing a whole family, to one of the Emperor's brothers, Archduke Anton Victor (1779-1835).

From 1828, Caroline Augusta, the Emperor's wife, had plates made with plant motifs at the Vienna Porcelain Manufactory, based on drawings from Pohl's book, *Plantae Brasiliæ*. The plates with flowers were used for dessert.

Schreibers distributed the work; among others, he wrote to Goethe. Among the 97 subscribers was also Goethe's friend Karl August, Grande Duke of Saxe-Weimar-Eisenach. In a letter to His Royal Highness Karl August, Goethe referred to Pohl's work, especially to manioc (*Manihot utilissima*); he found the example illustrated particularly agreeable: "I was particularly pleased to see the genus *Manihot* so fully presented; the stalk leaves of the *utilissima* display an important feature which highlights other unusual characteristics of this plant." (Weimar 9.12.1826)¹¹⁷

Manihot utilissima, manioc, one of the main vegetable foods, was described for the first time by Pohl. Goethe and Pohl met personally in Eger, in 1822, and they spoke at length about the expedition to Brazil and its minerals.¹¹⁸ In a letter to Schreibers dated 29th January 1826, Goethe describes Pohl as a worthy man he has thought of often since making his acquaintance in Eger.¹¹⁹ "We will all be fortunate, if as many of his conquests as possible are disclosed..."¹²⁰ Goethe also wanted to obtain copies of the "good Pohl's" herbarium, as he wrote to the Grand Duke Karl August.¹²¹ Schreibers had sent the Grand Duke seeds from Brazil, such as Araucaria (*A. angustifolia*).¹²² For his collection of minerals, Goethe asked Schreibers and others for a Brazilian topaz¹²³ (23rd February 1821).

Hence material from the expedition wasn't only shared among scientific institutions, such as the University Museum of Prague, the Johanneum in Graz, the Mekhitarist Museum in Vienna etc., but also with private individuals.

JOHANN BAPTIST EMANUEL POHL
Michael Sandler, *Manihot utilissima*.
In: *Plantarum Brasiliæ icones et descriptiones hactenus ineditæ*, volume 1,
hand-coloured lithograph, Vienna, 1827.
NHMW

¹¹⁵ Stephan Endlicher, *Bericht und Vorschlag über die Anstellung eines Zeichners am Muséé* 2.1.1837 [Report and proposal for the hiring of a draughtsman for the museum, 2/1/1837]. AFW NHMW Berichte und Verordnungen Botanisches Cabinet 1837.

¹¹⁶ *Franciscea*, now: *Brunfelsia*

¹¹⁷ Goethe-WA-IV, Bd.41, S.250 quoted by Schneider, 113.

¹¹⁸ Goethe's Diary 30th June 1822, published in Schneider, 140-141 and letter from Goethe to Karl Ludwig von Knebel, 23rd August 1822, published in Schneider 107.

¹¹⁹ Letter from Goethe to Schreibers, 29th January 1826 WA IV 40, 269-272 (v. 10 B/1, Weimar 2004; 242).

¹²⁰ Idem.

¹²¹ From Goethe to the Grand Duke Karl August, 30th December 1825. WA IV 40, 211 (Bd 10 B/1, Weimar 2004; 235).

¹²² Schneider, 102-105.

¹²³ Letter from Goethe to Schreibers, Weimar, 23rd February 1821, published in Schneider, 97-98.



DATABASED
PHOTO



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JOHANN BAPTIST EMANUEL POHL
Augusta oblongifolia POHL collected by
Pohl "by Corgo de Jaraguá", genus named
by Pohl as a tribute to the emperor's wife,
Caroline Augusta.
NHMW

JOHANN BAPTIST EMANUEL POHL
Michael Sandler, *Augusta oblongifolia*.
In: *Plantarum Brasiliæ icones et
descriptions hactenus ineditæ*, volume 2,
hand-coloured lithograph, Vienna, 1831.
NHMW



Augusta ollongifolia.



Sophrostachys floribunda.

JOHANN BAPTIST EMANUEL POHL
Michael Sandler, *Lophostachus floribunda*. In: *Plantarum Brasiliaeicones et descriptiones hactenus ineditae*, volume 2, hand-coloured lithograph, Vienna, 1831. NHMW

JOHANN BAPTIST EMANUEL POHL
Michael Sandler, *Lobelia thaphoidea*. In: *Plantarum Brasiliaeicones et descriptiones hactenus ineditae*, volume 2, hand-coloured lithograph, Vienna, 1831. NHMW



At the University of Natural Resources and Life Sciences there is a cyanite brought by Pohl and which came from the archives of Prince Rudolf.¹²⁴ In the account of his travels, Pohl mentions that in December 1820 he stayed in Vila Rica (since 1822, Ouro Preto, Minas Gerais) with the German Wilhelm Ludwig von Eschwege, a mountaineer and pioneer of industrial mining in Brazil, and that he found cyanite near his house.¹²⁵

Through the intermediation of Count Sternberg, parts of the botany collections were sent to other specialists for classification, since the collection's volume exceeded the capacity of a single researcher.¹²⁶

The herbarium of the botany and chemistry professor Joseph Franz von Jacquin (1766–1839) also contained samples collected by members of the expedition.

In turn, Martius paid homage to Pohl with the genus *Pohlana*, of the Rutaceae family.

The live animals added little to the Zoological Collection (Menagerie) at Schönbrunn in the years 1818, 1819 and 1821, because Emperor Francis had most of them transferred to his zoological collection in the gardens of the Burggarten park in Vienna, and his private garden at Rennweg.

Pohl took over 50 live birds to Austria, among them small and large macaws, cockatoos, a cassowary, as well as skunks (*Didelphys*), monkeys and land turtles, which all went to the imperial Menagerie in Hof-Burggarten. In 1820 new constructions had been built for the Menagerie and the rich shipments of animals, the terrace hot houses being no longer sufficient. The Emperor also visited daily for hours on end, along with his family.

When the expedition began, Pohl had resigned from his post in Prague and received only his daily stipend, unlike the other members, who continued to receive their full salaries during the journey. In late 1821 he approached Metternich again, pointing out his merits during the expedition, the vast collection, the upcoming publications, and proposed that the Emperor appoint him museum director. As a curator, he only dealt with the botany and mineralogy sections. Meanwhile, Joseph Natterer, Johann Natterer's brother, was in charge of the zoological part of the 'Brasilianum'. When Natterer returned to Brazil, he complained that Pohl had immediately become a curator, while he continued in the post of adjunct curator, which he had already held before the expedition.

JOHANN BAPTIST EMANUEL POHL
Michael Sandler, *Coutarea pubescens*.
In: *Plantarum Brasiliæ icones et descriptiones hactenus ineditæ*, volume 2,
hand-coloured lithograph, Vienna, 1831.
NHMW

¹²⁴ Otto Fitz, *Eine Sammlung erzählt*
[A collection tells] (Vienna 1993) 25

¹²⁵ Pohl, *Reisen*, v.2 (1837) 579

¹²⁶ Schweizer, zur Geschichte der
österreichischen Brasilienexpedition
(1998/99) 76; Schweizer, Sternberg
(2006) 102



Coutarea pubescens.

Rochus Schüch

Rochus Schüch (1788, Linhartice, in what is now the Czech Republic – 1844, Brazil) was the only one to remain in Brazil. In 1808, after concluding his studies at the University of Prague, he became a maths, natural history and nature studies teacher at the Jesuit secondary school in Troppau (Opava) and arrived in 1813 as a curator of the Imperial Natural History Cabinet in Vienna. He also taught mineralogy to the young 16 year-old Leopoldina at the imperial court.

As mentioned above, Leopoldina put him forward as librarian at the court in Rio de Janeiro. He also continued to be her closest adviser in all scientific matters. He devoted himself zealously to mineralogy and metallurgy and found deposits of gold and silver at the old Saco do Alferes.¹²⁷ In his role as adviser, he took part in the foundation of Leopoldina's Natural History Cabinet at the São Cristóvão palace, which would eventually give rise to the National Museum. Similarly, he advised Leopoldina to establish a Botanical Garden and zoo in Santa Cruz.

Leopoldina herself sent live plants and animals to her favourite sister, Marie Louise, and to her father, as well as hides and stuffed birds, minerals and butterflies. She exchanged natural objects with her former teacher Schreibers, the director of the Imperial Natural History Cabinet. One example of this is the *Chione paphia* shell she sent to Vienna in 1821.

Dom Pedro also presented his father-in-law Francis I (II) with natural products, among them the so-called "Dom Pedro case", on the occasion of his matrimony in 1817. The polished shells of a *Cyrena* were reworked for a tobacco case (*tabatière*). With the closure of the Brazilianum Museum in 1836, they were taken to the Imperial Natural History Cabinet.

Despite all Schüch's undeniable merits in favour of Brazil's intellectual development, after Leopoldina's death in 11th December 1826 he was dismissed. Dom Pedro wasn't interested in the work Schüch was doing, so he withdrew to the mineral-rich province of Minas Gerais, where he founded a melt shop where, using a special process, he produced excellent steel. This wasn't seen favourably, either. The growing xenophobia, the consequences of which Natterer was to suffer so painfully in Pará, but which found the Emperor's legal support, ended up causing him to be expelled, based on the foreigner's law. He tried soliciting the help of the Austrian authorities and director Schreibers to return home and find a job there. In order to improve his chances, he sent mineral and other natural objects to the court Natural History Cabinet (1826) and to the archdukes Rainer, Anton and Johann, in Vienna. However, these hopes were not fulfilled. On the other hand, after Dom Pedro I's abdication, Schüch was given the honourable task of acting as tutor and German teacher to Dom Pedro II, a mission he fulfilled brilliantly, gaining increasing influence over the young monarch.

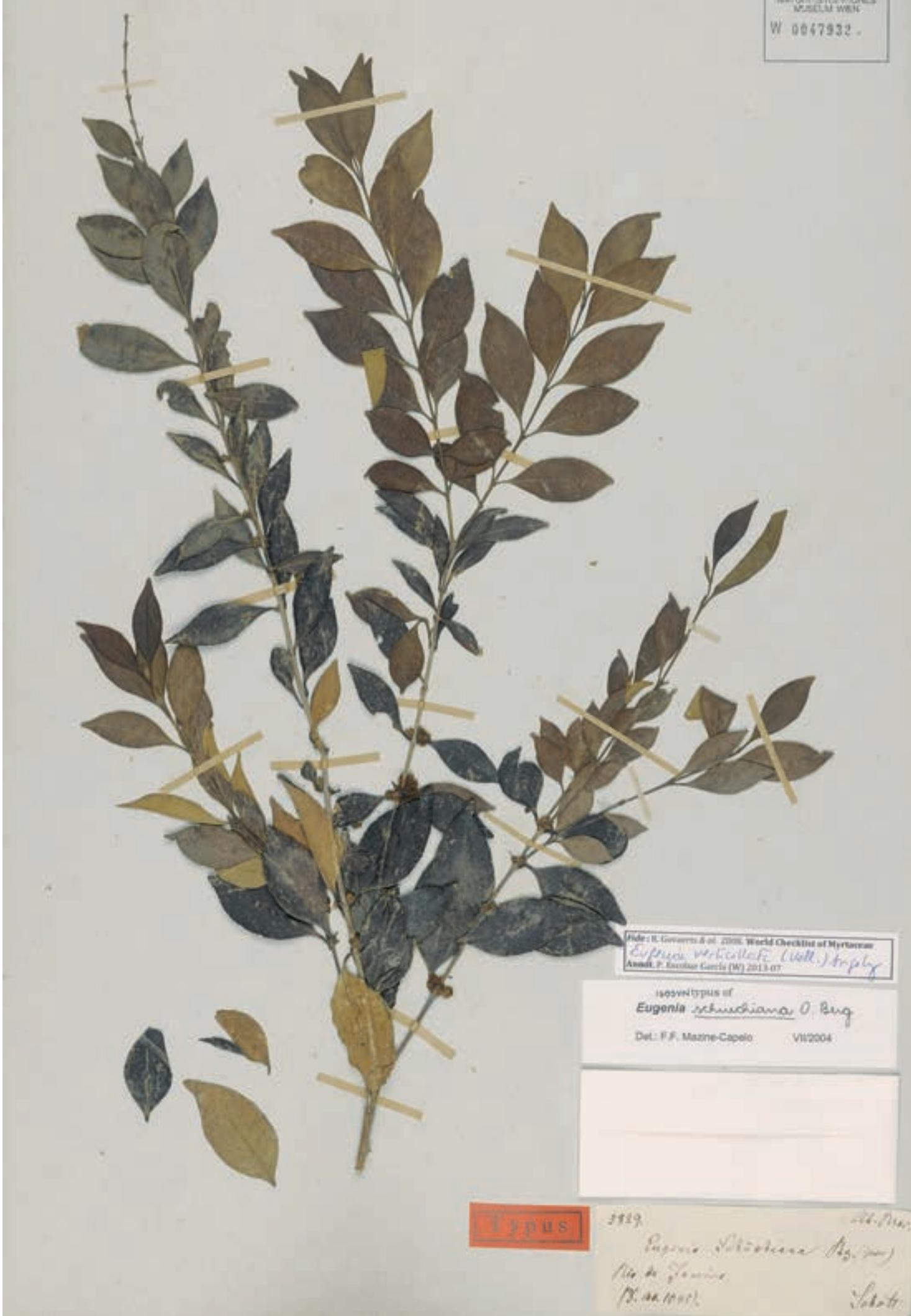
Schüch married Josefina Roth, a Swiss immigrant (from Nova Friburgo). Their adopted son Wilhelm¹²⁸ de Capanema (1824-1908), born in Timbopea, Brazil, became friends with Dom Pedro II, who later sent him to Vienna to study at the Polytechnic School, precursor of the Technical University. Wilhelm Schüch became a head engineer and reorganized the natural history collections in Rio de Janeiro, introduced the telegraph to Brazil and lead the whole field of telegraphy in the country. The Emperor also entrusted him with diplomatic duties, such as with conflicts on the border between Brazil and Argentina. In 1881, he was elevated to the title of baron.

A species of the genus *Eugenia* was named after Rochus Schüch. A sample of *Eugenia schuechiana*, collected by the gardener Schott, can be admired to this day at the Naturhistorisches Museum Wien.

HEINRICH WILHELM SCHOTT
Eugenia schuechiana BERG., collected
near Rio de Janeiro and named after
Rochus Schüch, Leopoldina's teacher.
NHMW

¹²⁷ N. da T.: Near the site of the current bus terminal in Rio de Janeiro.

¹²⁸ AfW NHMW Letter from Rochus Schüch to Endlicher, Boa Vista, 15/11/1841, published in Riedl-Dorn, Stephan Ladislaus Endlicher (unpublished dissertation, University of Vienna, 2017) 789-790



The expedition's artists

With Ender's illness and Buchberger's serious accident, these artists returned to Vienna and their substitution was discussed. An artist from Leopoldina's retinue who had already produced some pictures for the expedition, G.K. Frick, was considered. The embassy secretary Neveu warmly supported this idea, but Schreibers, director of the Imperial Natural History Cabinet, was against hiring him. He suggested that his drawings be paid for individually or that the artist be hired by the day. No agreement was reached.

Franz Josef Frühbeck came to Brazil with the Archduchess's delegation as Rochus Schüch's assistant. As well as this activity, and although he was merely self-taught, he did produce drawings which he took to Vienna in October 1818. He married and moved to the region of Styria as a merchant. In Vienna in 1829, he announced his "Great Visual Voyage to Brazil", an exhibition of 12 paintings from the journey and of Rio de Janeiro. Due to its great success, the exhibition was shown again in Germany in late 1830.¹²⁹

The Brazilian Museum (*Brasilianum*)

The *Austria* and *Augusta* sailed from Rio on 1st June 1818, taking the first expedition members and cases with objects collected. In March, the surgeon Kammerlacher returned to Vienna with a shipment of natural objects. The following month another shipment was sent with collections acquired by Pohl and Natterer and live animals, arriving in Vienna on 8th November 1819.

The first large collections already reached the Imperial Natural History Cabinet in 1819. Director Schreibers, whose chambers were just above the Cabinet, was forced to store the overflow of material in his private apartments, there not being enough room. When the next shipment was announced, in 1821, Schreibers threatened to leave the cases sitting in customs if no space were created for the collections.

A property was rented in the centre of Vienna, the Harrach'sches Haus, at Johannigasse 972 (today, number 7), where the 'Brasilianum' was housed from 1821 to 1835.

From the start, this Imperial Natural History Cabinet building was to be just temporary. It consisted of 13 rooms, as well as laboratories and storerooms. Johann Natterer's brother, Joseph Natterer, looked after the zoological collections, spread across seven rooms; the botanical collection took up three rooms. In 1833, a contemporary writer, Schmidl, mentioned 60,000 vegetal species. The minerals occupied two rooms; the ethnographic collection and pictures by Thomas Ender filled one room, together with over a thousand illustrations of Brazilian plants, which Pohl had commissioned from nature artist Michael Sandler.

¹²⁹ Schmutzer, Feest, 281.

The museum was open to the public on Saturdays from 9 a.m. to 12 p.m. "Friends of science and specialists" were able to arrange visits on any day.

Tickets could be purchased from Joseph Natterer and Pohl, who lived on the second floor of the museum.¹³⁰

The presentation and organization were the same as at the *Naturalienkabinet*: each object had a label "noted in accordance with whoever had ordered, discovered and informed" it.¹³¹

During the 10th Congress of German Naturalists and Doctors in Vienna, from 18th to 27th September 1832, the *Brasilianum* Museum was the main attraction. For three days it was opened exclusively to conference participants.

The collections of the new museum grew constantly and by 1835 had reached a volume nine times greater than at its inauguration.

The rental agreement expired in 1835 and the owners decided to sell the building. A frantic search began for an alternative to house the collections. Metternich even suggested a new building for the museum. But during the state conference it was recalled that there had already been plans to merge the *Brasilianum* with the Imperial Natural History Cabinet.

After the closure of the *Brasilianum* in 1835, the collections had to be included in the Imperial Natural History Cabinet. Curator Paul Maria Partsch worked for months on end, selecting minerals and rocks which had been collected but lacked criteria, Pohl being mainly a botanist only hired as a mineralogist on Stifft's insistence. Most of the collections were taken, on 9th August 1836, to the caves built at Laxenburg, in 8 carts, arranged in 19 cases of minerals, plus 2 large pieces, and among them 5 fossilized pieces of wood.¹³² The ethnographic objects remained on display for some time at the *Kaiserhaus*, at Ungargasse 349, and can today be seen in watercolours of the various displays. The arms and equipment were laid out in geometrical patterns. From 1840 to the creation of the Naturhistorisches Museum, in 1876 (opened in 1889), the objects were stored in different locations.

Although the librarian, botanist and sinologist Stephan Ladislaus Endlicher (1804-1849) was supposed to have succeeded Johann Baptist Emanuel Pohl, who died on 22nd May 1834, scheming prevented him from taking up the post. In 1836, he became the first curator of the Imperial Botany Cabinet and, four years later, professor of botany at the University of Vienna.

¹³⁰ Weis, 1832, 30.

¹³¹ Schmidl, 1833, 163.

¹³² AfW NHMW *Brasilianum* Minerals IV:
Confirmation of transfer: Certificate
from the directors of the imperial
palace and garden of Laxenburg, 9th
August 1836. And AfW NHMW
Brasilianum Minerals IV: transport
announced for 7:30 a.m. of 9th August
1836, dated 6th August 1836.



Brasilianum (Brazilian Museum)
Harrach'sches Haus I, Johannesgasse 76.

JOHANN BAPTIST EMANUEL POHL
Michael Sandler, *Antonia ovata*.
In: *Plantarum Brasiliæ icones et
descriptiones hactenus ineditæ*, volume 2,
hand-coloured lithograph, Vienna, 1831.
NHMW





JOHANN BAPTIST EMANUEL POHL
Michael Sandler, *Augusta lanceolata*,
Michael Sandler, *Augusta lanceolata*,
Indian ink drawing, after 1821.
This drawing was made from the
herbarium taken to Austria.
NHMW

JOHANN BAPTIST EMANUEL POHL
Michael Sandler, *Augusta oblongifolia*,
Indian ink drawing, after 1821.
The subject was the dried and
pressed plant.
NHMW

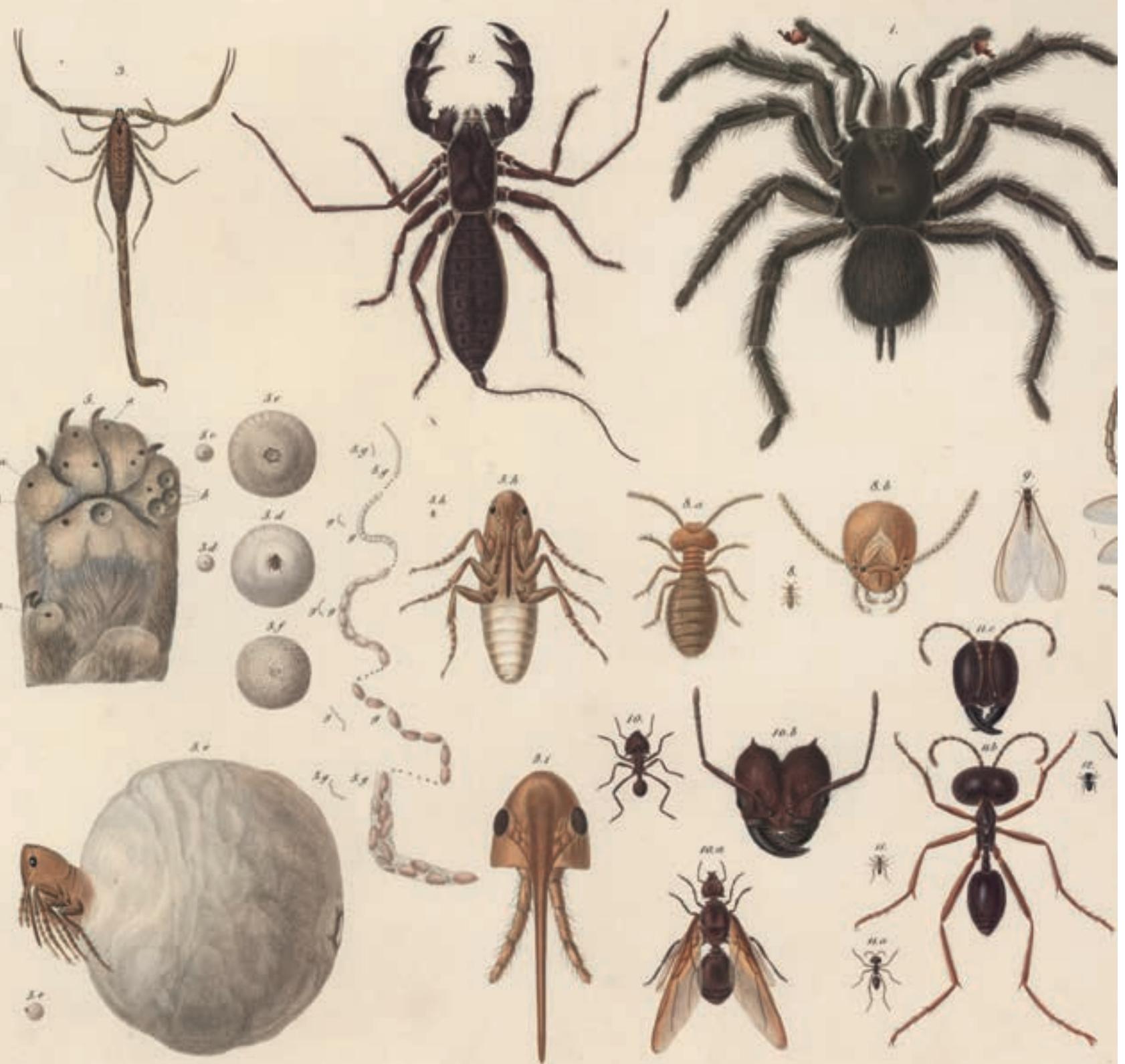
HERB. PALAV. VIVIDOR.

POHL JORN. PLINT. 12:111.

fig. 164.

123





Die vorzüglichsten lästigen Insekten Brasiliens

Edouard Deshayes.



The annoying insects of Brazil.
Pohl had artist Zehner paint samples
in the *Brazilianum*. Copperplate
engraving by Jung. Pohl 101-119,
kollar description, n.d.
NHMW

Echoes

If in 1817 newspapers were still publishing long accounts of the expedition, interest soon waned, before surging again when Pohl returned with the Botocudos Indians. With the early death of the Empress Leopoldina in 1826, ties to Brazil were curtailed and interest in the country wilted. Sochor and Natterer were by now in the deep interior of Brazil, with very little news reaching Vienna.

The presentation of financial accounts by expedition members was slow. In 1835 Schott and Schücht were still being asked to account for advances they'd received.¹³³ Schücht, who in the meantime had become the gardener at Laxenburg, was urged several times to account for the 400 florins that he spent from a total 700 florins he'd received.



ERICH CORRENS

Dr. Carl Fr.[iedrich] Ph.[ilip]v. Martius,
lithograph, Munich, 1850
NHMW

JOHANN BAPTIST EMANUEL POHL

Michael Sandler, from a watercolour by
Johann Buchberger of *Oxalis musciformis*,
hand-coloured lithograph, printed by the
Lithographic Institute of Vienna, 1820.
Buchberger's subject was a living plant
that he took to Austria.

NHMW

¹³³ HHStA OMeA 1835 34/18a

¹³⁴ Johann Baptist Spix (1781 Höchstadt
an der Aisch - 1826 Munich)
Naturalist, zoologist.

¹³⁵ Franz Palacky (org.), *Leben des Grafen
Kaspar Sternberg, von ihm selbst
beschrieben* [Life of Count Kaspar
Sternberg, described by himself].
(Prague 1868) 121

¹³⁶ Schneider, 108.

¹³⁷ Heinrich Wilhelm Schott, *Tagebücher
des k.k. Gärtners H. Schott, in Brasilien*
[Diaries of the imperial gardener H.
Schott in Brazil]. (Brünn 1820)

¹³⁸ Johann Emanuel Pohl, *Die Reise im
Inneren von Brasilien* [Travels in the
interior of Brazil], in 2 volumes (1832
and 1837), the second volume is
posthumous.

¹³⁹ Johann Baptist Spix, Carl Friedrich
Philipp von Martius, *Reise in Brasilien
auf Befehl S.M. Maximilian Joseph I.,
Königs von Bayern, im Jahre 1817-1820
gemacht und beschrieben* [Journey to
Brazil on the orders of His Majesty
Maximilian Joseph I, king of Bavaria,
undertaken and written in the
years 1817-1820]. 3 volumes (Munich
1823-1831)

¹⁴⁰ Giuseppe Raddi (1770-1829) took part
in the Austrian mission to Brazil on
the orders of the Grand Duke of
Tuscany.

Publication by Martius and Endlicher of Flora Brasiliensis



¹⁴¹ Carl Philipp Martius (Hg.), *Flora brasiliensis seu enumeratio plantarum Brasilia tam sua sponte quam accente cultura provenientium, quas in itinere auspiciis Maximiliano Josephi L. Bavariae regis annis 1817-1820 peracto collegit, partim descripsit 2 volumes* (Stuttgart/Tübingen 1829 and 1833) cf.. TL v.3, 332. In the second volume, Nees describes the grasses; the first volume is devoted to the cryptogams described by Eschweiler and Nees von Esenbeck. For the genesis of the work, cf.. Hans Walter Lack, *Nees von Esenbeck und die Biodiversität der Gefäßpflanzen. In: Benno Parthier (org.), Christian Gottfried Nees von Esenbeck. Die Bedeutung der Botanik als Naturwissenschaft in der ersten Hälfte des 19.Jahrhunderts – Methoden und Entwicklungswegs (=Acta Historica Leopoldina 47; Stuttgart 2006) 157-171, here: 161-164*

¹⁴² Franz de Paula von Schrank (1747 Vornbach – 1835 Munich), Jesuit, naturalist, first director of the Botanical Garden of Munich, founded in 1809.

¹⁴³ Letter from Endlicher to Martius, 27/1/1841. Bavarian State Library, Munich: *Martiusiana* II, A,2 Stephan Ladislaus Endlicher Mappe II

By order of the Bavarian king Maximilian I Joseph, Carl Philipp Friedrich von Martius (1794-1868), of the Royal Academy of Sciences of Bavaria, took part in the Austrian expedition to Brazil in 1817, together with zoologist Johann Baptist Spix¹³⁴, and returned to Europe with vast collections. In 1822, soon after Pohl arrived in Vienna, he travelled with Kaspar Graf Sternberg via Regensburg to Munich, in order to talk to Martius and Spix about the joint publication of a work about Brazil, "so that Brazil's natural beauties don't appear twice with different names and make science even more difficult".¹³⁵ Even Goethe became interested in a joint project, as indicated in his letter to Sternberg of 26th August 1822.¹³⁶ But Pohl came away empty-handed and before long devoted himself to creating the Brazilianum Museum.

Travel accounts of the expedition were published, such as those of Heinrich Wilhelm Schott,¹³⁷ Pohl,¹³⁸ Spix and Martius,¹³⁹ and lesser works about Brazil, such as those by Mikan, Schott, the magnificent work in two volumes *Plantarum brasiliensium icones et descriptiones* by Pohl, and the unfinished book *Plantarum brasiliensium nova genera et species novae vel minus cognitae* (1825) by Tuscan naturalist Giuseppe Raddi.¹⁴⁰ Martius's intention was to publish a complete work of the universe of Brazilian flora. Clearly, collaborators would need to be hired for such an undertaking. Martius succeeded in obtaining the support of Christian Gottfried Daniel Nees von Esenbeck and Franz Georg Eschweiler. In 1829, Martius published the first volume of *Flora brasiliensis seu enumeratio plantarum Brasilia tam sua sponte quam accente cultura provenientium, quas in itinere auspiciis Maximiliano Josephi L. Bavariae regis annis 1817-1820 peracto collegit, partim descripsit*.¹⁴¹ However, after the publication of the second volume in 1833, the series was discontinued.

After the Emperor's death in 1835, the 'Brazilianum' was closed and the objects were absorbed by the Natural History Cabinet. Pohl's botanical collection alone numbered over 30,000 pieces.

Martius, who since 1826 had been professor of botany, was named Franz de Paula von Schrank's successor in 1836,¹⁴² becoming the first director of the Botanical Garden and the botanical collections. Following an agreement with Endlicher, who had been appointed curator of the Court Botanical Cabinet that same year, the publication of a *Flora Brasiliensis* was planned, based on the collections in Vienna and Munich. The book was to be published by the Imperial Natural History Cabinet.

Soon the botanists agreed to go to both Emperor Ferdinand I and King Ludwig I of Bavaria and secure their agreement to appear together on the cover. The first parts of the work were published "under the auspices" of Ferdinand I, Ludwig of Bavaria and Pedro II of Brazil.

Despite all the difficulties, it was Endlicher's "honour" and "greatest joy" to publish this work together with Martius. "In all my life I've never taken pride in anything as much as this joint publication."¹⁴³

Endlicher worked on the first volumes, from 1840 to 1847. After Martius's death in 1868, his disciple August Wilhelm Eichler (1839-1887) took on the publication and, following his death in 1887, Ignaz Urban. The last of the 15 volumes (in 40 partial volumes) came out in 1906. Sixty-six botanists took part in this monumental work.

Inspired by the Austrian mission in Brazil: Austrian explorers in Brazil after 1821

Through the collections, these naturalists made material available and created the conditions for scientific research right down to the present day. Never again in Austria's history of natural collections did so many objects of such diversity reach the country's museums from one single expedition.

After this undertaking, there were other Austrian expeditions to Brazil that complemented the collections about the country in the museums.

The Tyrolean Johann K. Hocheder, a keen mountaineer, spent the years 1830-32, 1833-35 and 1836-40 in Minas Gerais working for an English mining company, where he reached the position of superintendent and sent several mineral samples to Austria. And with his help, his friend Virgil von Helmreichen zu Brunnfeld, a geologist from Salzburg and fellow mountaineer, travelled to Brazil in 1936 to work as a mining specialist. Helmreichen drew up three geological profiles of the province of Minas Gerais.

As well as the mineralogical, botanical, zoological and ethnographic publications and collections sent to Austria, the geological map of South America produced in 1854 by F. Foetterle, based on data by Hocheder and Helmreichen, bears witness to their work in Brazil.

Between 1846 and 1848, the courageous Viennese woman Ida Pfeiffer, née Reyer (1797-1858), whom Humboldt greatly admired, visited Brazil during her first round-the-world trip. Despite being robbed during one of her excursions, she was not discouraged and went as far as the region of the Puri tribe, in the Andes. Although not a scientist, she was capable of reaching a wide circle of people with her knowledge of the country's character and its people. She was very interested in nature and took various objects, such as minerals, plants, shells and snails to the Imperial Natural History Cabinet in Vienna. The warship *Novara*, reformed as a research vessel and which circumnavigated the globe from 1857 to 1859, docked in Rio de Janeiro for four weeks and carried natural collections. Navy vessels were requested to record scientific observations during training missions and bring collections to scientific institutions. As well as commercial and scientific objectives, the missions of the imperial navy also served to deal with diplomatic relations. The corvettes *Carolina* (1857/58), *Saida* (1879/80, 1884/86, 18886/87, 1890/92), *Helgoland* (1872/73), *Aurora* (1884/85) and *Frundsberg* (1896/97), among others, all stopped off in Brazil.

The Archduke Ferdinand Maximilian, who would later become Emperor of Mexico, founded botanical collections with the naval surgeon and botanist H. Wawra von Fernsee and the gardener F. Maly. Stuffed animals and paintings of the forests by J. Selleny complemented the rich collection.

Richard Payer (1836-after 1912) – older brother of Julius Payer, the famous Arctic explorer – devoted 30 years of his life to exploring regions of the Amazon and the Andes.

Franz Steindachner (Vienna, 1834 - Vienna, 1919), ichthyologist and last director of the Naturhistorisches Museum, visited Brazil twice. In 1903, together with O. Reiser and F. Penther, he travelled to regions¹⁴⁴ Natterer hadn't reached because of the civil war. Both this undertaking and a previous botanical expedition were financed by the Austrian Academy of Sciences.

Generally speaking, together with Natterer's subsequent activities, the Austrian expedition to Brazil between 1817 and 1821 can be considered the apex of the scientific explorations promoted by Austria to exotic countries, until the *Novara* expedition from 1857 to 1859, with more profound and complete results and long-lasting relevance to our knowledge of Brazil's nature and indigenous culture.

144 Northeast of Brazil.



Members of the Brazilian mission on
Ilha das Onças, near Pará, tapping a rubber
tree, from left to right: Radax, Goeldi,
Franz Steindachner, Reisner Sartorius.
Silver gelatin dry plate copy, partially
colorized, 1903.
NHMW



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FRANZ KOLB
Metternichia principis
Hand-coloured lithograph, printed by the
Lithographic Institute of Vienna, 1820.
The specimen collected by Schott near
Sebastianópolis was the artist's subject.
NHMW

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Traveller Profiles

Vitor Vieira
Hugo Moss

Head ornament with neck covering
Makuna-ui, Guiana, region of the
Brazilian/Venezuelan frontier, around
1830. Feathers, dried bird skin, vegetal
fibre, ca. 96 cm.
Natterer collection
Guiana head adornments are used mostly
- sometimes only - by the men as part of
rituals. In a shamanic context, feathers
and dried bird skins allow us to see the
close ties to birdlike spiritual beings, the
shamans' preferred spiritual allies.
This head ornament, comprising of
a band to which the headdress with
feathers is attached, and a neck covering
made of bits of dried bird skin, is typical
of the region of the frontier between
Brazil and Venezuela. The ethnic
attribution to a group called Makuna-ui
isn't so clear, however; although there
are Makuna in southern Colombia, the
feather adornments they use nowadays
correspond to Tukano groups, and clearly
differ stylistically from this piece. (CA)
Weltmuseum Wien

NICOLAS-ANTOINE TAUNAY
(1755-1830) France
Journeys in Brazil: Rio de Janeiro.
Painter. Member of the French artistic mission,
in Brazil from 1816 to 1821, a founder of the
Imperial Academy of Fine Arts.

ALEXANDRE RODRIGUES FERREIRA
(1756-1815) Brazil
Journeys in Brazil: Captaincies of Grão-Pará,
Rio Negro, Mato Grosso, Cuiabá.
Naturalist. Member of the Royal Academy
of Sciences of Lisbon. In Brazil between
1783 and 1792 and during this period lead a
philosophical expedition to the centre-north
of the Brazilian colony, at the behest of the
queen, Dona Maria I. Produced a vast number
of manuscripts, some of which made up
Kapa Editorial's 2002 publication *Viagem ao
Brasil*.

JOHN MAWE
(1764-1829) England
Journeys in Brazil: Santa Catarina, Paraná, São
Paulo, Minas Gerais, Rio de Janeiro.
Mineralogist. In Brazil between 1807 and
1811. In 1812 published the book *Travels in
the Interior of Brazil, Particularly in the Gold and
Diamond Districts of That Country, by Authority of
the Prince Regent of Portugal: Including a Voyage
to the Rio de la Plata and an Historical Sketch of
the Revolution of Buenos Aires*. The work was
translated into Portuguese in 1978 by Editora
da Universidade de São Paulo, under the title
Viagens ao interior do Brasil.

JEAN-BAPTISTE DEBRET
(1768-1848) France
Journeys in Brazil: Rio de Janeiro, São Paulo,
Paraná, Santa Catarina.
Painter. One of the pre-eminent artists of
his time. His works have been studied by
numerous researchers and constitute a rich
historical source material. He arrived in Brazil
in 1816 with the French Artistic Mission
as a painter, returning to France in 1831.
Between 1834 and 1839, published the book
*Voyage pittoresque et historique au Brésil, ou
Séjour d'un Artiste Français au Brésil*, in Paris.
A Brazilian edition was published in 1940
by Martins, entitled *Viagem Pitoresca e
Histórica ao Brasil*.

JOHANN CHRISTIAN MIKAN
(1769-1844) Austria
Journeys in Brazil: Rio de Janeiro.
Natural history professor at the University
of Prague. One of the heads of the Austrian
scientific expedition. In Brazil during the years
1817 and 1818.

GEORG HEINRICH VON LANGSDORFF
(1774-1852) Germany (naturalized Russian)
Journeys in Brazil: Rio de Janeiro, Minas
Gerais, São Paulo, Mato Grosso, Amazon.
Doctor and Russian consul general. Headed
Russia's Langsdorff Expedition between
1822 and 1829 and wrote diaries which are
now considered an important historical
documentation of Brazil at the time. His texts
gave rise to the 1997 publication *Os diários de
Langsdorff*, published by Fiocruz Publishing.

WILHELM LUDWIG VON ESCHWEGE
(1777-1855) Germany
Journeys in Brazil: Rio de Janeiro, São Paulo,
Minas Gerais.
Engineer and geologist. Came to Brazil in
1809 and stayed until 1821, when he returned
to Europe. In 1833, published *Brasilien: die
Neue Welt in Topographischer, Geognostischer,
Bergmännischer, Naturhistorischer, Politischer und
Statistischer Hinsicht Während eines Elfjährigen
Aufenthaltes von 1810 bis 1821; mit Hinweisung
auf die Neueren Begebenheiten (1830); Beiträge
zur Gebirgskunde Brasiliens (1832) and Pluto
brasiliensis: Eine Reihe von Abhandlungen
Über Brasiliens Gold-, Diamanten und Anderen
Mineralischen Reichthum, Über die Geschichte
Seiner Entdeckung, Über das Vorkommen Seiner
Lagerstätten, des Betriebs, der Ausbeute und
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Portuguese edition of which is available at
<http://www.brasiliana.com.br/brasiliana/colecao/obras/136/pluto-brasiliensis-memorias-sobre-as-riquezas-do-brasil-em-ouro-diamantes-e-outros-minerais-v-1>.

AUGUST FRANÇOIS CESAR PROVENCIAL DE
SAINT HILARE
(1779-1853) France
Journeys in Brazil: Rio de Janeiro, Espírito
Santo, Minas Gerais, Goiás, São Paulo, Santa
Catarina, Rio Grande do Sul.
Botanist. In Brazil from 1816 to 1822.
Published several texts about his travels,
one of the most important being *Voyages dans
l'intérieur du Brésil*, from 1830. Several of his
texts are available at <http://www.brasiliana.com.br/brasiliana/colecao/autores/25/auguste-de>.

CLARKE ABEL
(1780-1826) England
Journeys in Brazil: Rio de Janeiro.
Doctor and naturalist. Published *Narrative of
a Journey in the Interior of China in 1818, and of
a Voyage to and from that Country, in the Years
1816 and 1817; Containing an Account of the
Most Interesting Transactions of Lord Amherst's
Embassy to the Court of Pekin, and Observations
on the Countries Which it Visited*, in London.
The text is available at <https://babel.hathitrust.org/cgi/pt?id=hvd.32044107242307>.

JOHANN BAPTIST VON SPIX
(1781-1826) Germany
Journeys in Brazil: Rio de Janeiro, São Paulo, Minas Gerais, Bahia, Pernambuco, Piauí, Maranhão, Pará, Amazon.
Zoologist. Took part in the Austrian scientific expedition and was in Brazil from 1817 to 1820. Spix returned to Europe with a vast collection of plants and animals. In Munich in 1823 he published, together with Carl Friedrich Philipp von Martius, the first volume of *Reise in Brasilien*, one of the most important works in Brazil's natural history. The work was translated into Portuguese in 1938 by the publisher Imprensa Nacional, entitled *Viagem pelo Brasil*; subsequent editions have been published ever since.

ADELBERT VON CHAMISSO
(1781-1838) Germany
Journeys in Brazil: Santa Catarina.
Naturalist. Took part as botanist in the Russian Rurik Expedition, commanded by Otto von Kotzebue.

JOHANN BAPTIST EMANUEL POHL
(1782-1834) Austria
Journeys in Brazil: Rio de Janeiro, Minas Gerais, Goiás.
Doctor and botanist. Member of the Austrian scientific expedition, staying in Brazil between 1817 and 1821. In Vienna in 1832, published *Reise im Innern von Brasilien, auf Allerhöchsten Befehl Seiner Majestät de Kaisers von Österreich Franz den Erstern, in den Jahren 1817 - 1821 Unternommen* [Travels to the Interior of Brazil, on the Highest Orders of His Majesty Francis I of Austria, Undertaken in the Years 1817 - 1821]. There is a Portuguese edition of the work, published in 1951 by the Instituto Nacional do Livro, entitled *Viagem no interior do Brasil*, available at: <http://bd.camara.leg.br/bd/handle/bdcamara/17962>.

MAXIMILIAN ZU WIED-NEUWIED
(1782-1867) Germany
Journeys in Brazil: Rio de Janeiro, Espírito Santo, Bahia.
Prince of Wied-Neuwied. In Brazil from 1815 to 1817, accompanying the German naturalists Georg Freyress and Friedrich Sellow. Between 1820 and 1821 he published *Reise nach Brasilien in den Jahren 1815 bis 1817*, a Portuguese edition of which is available at <http://www.brasiliana.com.br/obras/viagem-ao-brasil-nos-anos-de-1815-a-1817>; besides other works on Brazil's natural history.

JOHANN BAPTIST NATTERER
(1787-1843) Austria
Journeys in Brazil: Rio de Janeiro, São Paulo, Paraná, Goiás, Mato Grosso, Amazon, Pará, Acre.
Naturalist. Member of the Austrian scientific expedition who stayed in Brazil from 1817 to 1835. During those years, produced one of the most important natural science collections, from materials collected throughout Brazil. Unlike other travellers, he published no accounts of his work or even autobiographical writings, just official reports.

JOAQUIM CÂNDIDO GUILLOBEL
(1787-1859) Portugal
Journeys in Brazil: Rio de Janeiro, Maranhão.
Painter and architect. Participated in the works of the Imperial Palace of Petrópolis, having ties to the Imperial Military Academy. He arrived in Brazil in 1808 and remained until his death.

GEORG WILHELM FREYREISS
(1789-1825) Germany
Journeys in Brazil: Rio de Janeiro, Minas Gerais, Bahia.
Ornithologist. Came to Brazil in 1813 and was in Minas with Eschwege. Founded the German colony of Leopoldina, Bahia. In 1816 he became a correspondent for the Royal Academy of Sciences in Stockholm. His work *Reise in Brasilien* was published posthumously in 1968. The work was translated into Portuguese and published in 1982 by Editora Itatiaia, entitled *Viagem ao interior do Brasil*.

FRIEDRICH SELLOW
(1789-1831) Germany
Journeys in Brazil: Rio de Janeiro, Espírito Santo, Bahia, Minas Gerais, Paraná, Santa Catarina, Rio Grande do Sul.
Naturalist. Participated as botanist in Prince Maximilian zu Wied-Neuwied's expedition. Sent a vast amount of material collected and produced in Brazil to the Natural History Museum in Berlin.

AUGUSTUS EARLE
(1793-1838) England
Journeys in Brazil: Rio de Janeiro, Pernambuco, Bahia.
Painter. In Brazil from 1820 to 1824. Produced some illustrations for Mary Graham's *Journal of a Voyage to Brazil, and Residence There, During Part of the Years 1821, 1822, 1823*, published in 1824. Earle would later take part in Darwin's expedition aboard HMS Beagle.

JACQUES ETIENNE VICTOR ARAGO
(1790-1854) France
Journeys in Brazil: Rio de Janeiro.
Writer, painter and playwright. Visited Rio de Janeiro in 1817. In 1839, published *Voyage autour du monde: souvenirs d'un aveugle*.

THOMAS MARIE HIPPOLYTE TAUNAY
(1793-1864) France
Journeys in Brazil: Rio de Janeiro, São Paulo, Bahia, Espírito Santo, Pernambuco, Ceará, Minas Gerais, Mato Grosso, Rio Grande do Norte, Santa Catarina, Rio Grande do Sul, Maranhão.
Painter. Published, in co-authorship with Jean-Ferdinand Denis, *Le Brésil, ou, Histoire, moeurs, usages et coutumes des habitans de ce royaume*, in 1822. Text available at: <https://digital.bbm.usp.br/handle/bbm/7176>.

THOMAS ENDER
(1793-1875) Austria
Journeys in Brazil: Rio de Janeiro, São Paulo.
Painter. Member of Spix and Martius' scientific expedition. *Viagem ao Brasil nas Aquarelas de Thomas Ender*, a work in three volumes published by Editora Kapa in 2000, is one of the most important publications in Portuguese about the artist.

RENÉ PRIMEVÈRE LESSON
(1794-1849) France
Journeys in Brazil: Santa Catarina.
Naturalist and ornithologist. Came to Brazil in 1822 with Louis Isidore Duperrey's expedition to circumnavigate the earth. His account of his passage through Brazil can be found in: *Voyage autour du monde exécuté par Ordre du Roi, sur la Corvette de Sa Majesté, La Coquille pendant les années 1822, 1823, 1824 et 1825, sous le ministère et conformément aux instructions de S. E. M. Marquis de Clermont-Tonnerre, ministre de la marine; et publié sous les auspices de son excellence Mgr le Cte de Chabrol, ministre de la Marine et des colonies, par M. L. Dupperry, capitaine de frégate, chevalier de Saint-Louis et membre de la légion d'honneur, commandant de l'expédition*, published in 1826, Paris; available at <https://archive.org/details/voyageautourdumoolessgoog/page/n6>.

HEINRICH WILHELM SCHOTT
(1794-1865) Austria
Journeys in Brazil: Rio de Janeiro, São Paulo, Espírito Santo.
Botanist. Took part in the Austrian scientific expedition and stayed in Brazil from 1817 to 1821.

CARL FRIEDRICH PHILIPP VON MARTIUS
(1794-1868) Germany
Journeys in Brazil: Rio de Janeiro, São Paulo, Minas Gerais, Bahia, Pernambuco, Piauí, Maranhão, Pará, Amazon.
Doctor and botanist. Participated in the Austrian scientific expedition to Brazil from 1817 to 1820. In Munich in 1823, co-authored with Carl Friedrich Philipp von Martius the publication of the first volume of *Reise in Brasilien*, one of the most important works in Brazil's natural history. The work was translated into Portuguese in 1938 by publisher Imprensa Nacional under the title *Viagem pelo Brasil*; subsequent editions have been published ever since. After Spix's death, it fell to Martius to publish further volumes of the work.

LOUIS CHORIS
(1795-1828) Ukraine
Journeys in Brazil: Santa Catarina.
Painter. Member of the Russian Rurik expedition, lead by Otto von Kotzebue. In Brazil in 1815. From 1820 to 1823, published *Voyage pittoresque autour du monde*, in Paris, with illustrations of Santa Catarina by the author; available at https://archive.org/details/cihm_17102/page/n5.

HENRY CHAMBERLAIN
(1796-1844) England
Journeys in Brazil: Rio de Janeiro, São Paulo, Minas Gerais.
Lieutenant, painter and designer. In Brazil between 1819 and 1820. In 1822 published *Views and Costumes of the City of Rio de Janeiro*; Portuguese edition available at <https://www2.senado.leg.br/bdsf/handle/id/227375>.

JACQUES ETIENNE VICTOR ARAGO
(1790-1854) France
Journeys in Brazil: Rio de Janeiro.
Author, painter and playwright. Visited Rio de Janeiro in 1817. In 1839 published *Voyage autour du monde: souvenirs d'un aveugle*.

PIETER GODFRED BERTICHEN
(1796-1866) Holland
Journeys in Brazil: Rio de Janeiro.
Painter. Arrived in Brazil in 1837. In Rio de Janeiro in 1856, published *O Brasil pitoresco e monumental*, thanks to the efforts of Eduard Rensberg.

PAUL HARRO-HARRING
(1798-1870) Denmark
Journeys in Brazil: Rio de Janeiro.
Painter. Worked for the English abolitionist journal *The African Colonizer*, which commissioned him to report on the conditions of slaves in Brazil. In Brazil in 1840.

JEAN-FERDINAND DENIS

(1798-1890) France

Journeys in Brazil: Rio de Janeiro, São Paulo, Bahia, Espírito Santo, Pernambuco, Ceará, Minas Gerais, Mato Grosso, Rio Grande do Norte, Santa Catarina, Rio Grande do Sul, Maranhão
One of the foremost French travellers, correspondent of the Museum of Natural History in Paris. In Brazil from 1817 to 1819. In 1822 published, in co-authorship with Hippolyte Taunay, *Le Brésil, ou, Histoire, moeurs, usages et coutumes des habitans de ce royaume*, available at <https://digital.bbm.usp.br/handle/bbm/7176>.

CHARLES LANDSEER

(1799-1879) England

Journeys in Brazil: Rio de Janeiro, Pernambuco, Bahia, Espírito Santo
Painter. Took part in English ambassador Sir Charles Stuart's mission. In Brazil between 1825 and 1826.

PETER WILHELM LUND

(1801-1880) Denmark

Journeys in Brazil: Rio de Janeiro, São Paulo, Goiás, Minas Gerais
One of the most important Danish naturalists, who became known as the "Father of Brazilian Palaeontology". First in Brazil in 1820, returning in 1833 and remaining until his death. In 1950, *Memórias sobre a Paleontologia Brasileira* was published in Portuguese by Instituto Nacional do Livro. The Biblioteca Mineira de Cultura published his *Memórias científicas* in 1935.

ALCIDE DESSALINES D'ORBIGNY

(1802-1857) France

Journeys in Brazil: Rio de Janeiro
Naturalist and palaeontologist. In Brazil in 1826. In Paris in 1835, published *Voyage dans l'Amérique Méridionale : (le Brésil, la république orientale de l'Uruguay, la République argentine, la Patagonie, la république du Chili, la république de Bolívia, la république du Pérou)*, exécuté pendant les années 1826, 1827, 1828, 1829, 1830, 1831, 1832, et 1833. A year later, also in Paris, published *Voyage pittoresque dans les deux Amériques*, a work that purports to be a general summary of the travel accounts available at the time, including authors from the 16th to 19th centuries; available at <https://archive.org/details/voyagepittoresqueoorbirch/>. In 1976, part of this work was translated into Portuguese and published under the title *Viagem pitoresca através do Brasil*, by Editora da Universidade de São Paulo.

JOHANN MORITZ RUGENDAS

(1802-1858) Germany

Journeys in Brazil: Rio de Janeiro, Mato Grosso, Espírito Santo, Bahia.
Painter. In Brazil from 1822 to 1825. In 1835, published *Voyage pittoresque dans le Brésil*. The work was translated into Portuguese and published in 1976 by Editora da Universidade de São Paulo, as *Viagem pitoresca através do Brasil*. His paintings have become emblematic representations of the nature and inhabitants of Brazil at the time.

ANTOINE HERCULE ROMUALD

FLORENCE

(1805-1879) France

Journeys in Brazil: Rio de Janeiro, São Paulo, Mato Grosso, Pará.
Naturalist and designer. Took part in the Langsdorff Expedition. Arrived in Brazil in 1824 and remained in the country for the rest of his life. In 1941, one of his most important manuscripts gave rise to the Brazilian publication *Viagem fluvial do Tietê ao Amazonas de 1825 a 1829*, available at <https://www2.senado.leg.br/bdsf/handle/id/188906>.

CHARLES ROBERT DARWIN

(1809-1882) England

Journeys in Brazil: Rio de Janeiro, Bahia, Pernambuco
Naturalist. One of the most important names in modern science. In Rio de Janeiro in 1832 and then, in 1836, he made stops in Salvador and Recife during his return voyage to England. The account of his visits to Brazil can be found in *The Voyage of the Beagle*, published in 1839, which has several Portuguese editions.

CHARLES BUNBURY

(1809-1886) England

Journeys in Brazil: Rio de Janeiro, Minas Gerais
Naturalist. In Brazil between 1833 and 1835. During this period, he wrote the manuscript Account of a journey in Brazil in 1833-35, the text behind the 1940 publication *Narrativa de viagem de um naturalista inglês ao Rio de Janeiro e Minas Gerais (1833-1835)*, in an edition of the Biblioteca Nacional do Rio de Janeiro Annals, available at http://memoria.bn.br/pdf/402630/per402630_1940_00062.pdf.

FRANCIS DE CASTELNAU

(1810-1880) France

Journeys in Brazil: Rio de Janeiro, Goiás, Mato Grosso.

Geographer. Commanded the scientific Castelnau Expedition to Brazil between 1842 and 1845. In Paris from 1850 to 1859, published *Expédition dans les parties centrales de l'Amérique du Sud : from Rio de Janeiro to Lima, et de Lima au Para*, a work in seven parts and 16 volumes; available at <https://archive.org/details/expeditiondansles7113cast>; Portuguese edition available at <http://www.brasiliana.com.br/obras/expedicao-as-regioes-centrais-da-america-do-sul-vi>.

GEORGE GARDNER

(1812-1849) England

Journeys in Brazil: Rio de Janeiro, Minas Gerais, Bahia, Alagoas, Pernambuco, Ceará, Piauí, Goiás, Maranhão.
Doctor and botanist. In Brazil from 1836 to 1841. In 1846, published *Travels in the Interior of Brazil, 1836-1841*; Portuguese edition available at <http://www.brasiliana.com.br/brasiliana/colecao/obras/125/Viagens-pelo-Brasil-Principalmente-nas-provincias-do-Norte-e-nos-Distritos-do-Ouro-e-do-Diamante-durante-os-anos-de-1836-1841>.

RICHARD SPRUCE

(1817-1893) England

Journeys in Brazil: Amazon
Botanist. Spruce arrived in Brazil in 1849 and initially joined Alfred Russel Wallace and Henry Walter Bates in Santarém, on the Amazon, before going on to explore the Trombetas and Rio Negro rivers. In spite of ailments such as partial deafness and chronic back pain, he spent 15 years exploring Brazil, Peru, Ecuador and Venezuela. In 1908 Wallace compiled Spruce's diaries in *Notes of a Botanist on the Amazon and Andes*.

JOSEPH ALFRED MARTINET

(1821-1875) France

Engraver. The album published in 1847, *O Brasil pitoresco, histórico e monumental*, which he wrote and illustrated, was dedicated to the Emperor D. Pedro II; available at http://objdigital.bn.br/acervo_digital/div_iconografia/icon211917/icon211917.pdf.

RICHARD FRANCIS BURTON

(1821-1890) England

Journeys in Brazil: Minas Gerais, Bahia, Rio Grande do Sul.

Explorer. From 1865 the great explorer spent three years as British consul in Santos and during that time made an expedition to the highlands of Minas Gerais, canoeing the length of the São Francisco river, as well as visiting the battlefields of the Paraguayan War. Published the *Explorations of the Highlands of Brazil*, with a Full Account of the Gold and Diamond Mines, also Canoeing Down the Great River São Francisco, from Sabará to the Sea and Letters from the Battlefields of Paraguay in 1869 and 1870, respectively.

ALFRED RUSSEL WALLACE

(1823-1913) England

Journeys in Brazil: Pará, Amazon
Naturalist. Arrived in Brazil in 1848 with Henry Walter Bates and spent the next four years charting the Rio Negro and collecting specimens, all of which were sadly destroyed when he was shipwrecked during the return crossing in 1852. Back in England, Wallace published the books *Palm Trees of the Amazon and Travels on the Amazon* and later developed the theory of evolution also formed by Charles Darwin, their first papers being published jointly in 1858.

HENRY WALTER BATES

(1825-1892) England

Journeys in Brazil: Pará, Amazon
Naturalist. Spent 11 years in Brazil from 1848, arriving with Alfred Russel Wallace and collecting over 14,712 species from the regions of the Amazon and Tocantins rivers. Bates returned to England in 1859 due to failing health and in 1863 published the widely admired account *The Naturalist on the River Amazons*.

Acknowledgment from the Editors

Claudia Augustat
Ilse Jung
José Cândido Ferrão Monteiro Soares
Julia Araújo
Dominik Riedl
Sabine Eggers

Photographic Credits

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Dominik Riedl

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José Paulo Monteiro Soares

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George Milek

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Notes

Naturhistorisches Museum Wien (NHMW)
Natural History Museum Vienna

Weltmuseum Wien
Vienna World Museum
(Former Vienna Museum of Ethnology)

Akademie der bildenden Künste Wien (K.AKAD)
Academy of Fine Arts Vienna

This book was composed with the types
of the Proforma typographic family,
printed in the workshops of Ipsilon Editora
Gráfica, on Eurobouk 170g paper, for Kapa
Editorial & Editora Index, in the year of
celebration 40 years of publishers.