Preface

This volume comprises most of the research presented at the 3rd International Symposium of the ICA Commission on the History of Cartography which took place at the University of Texas at Arlington on October 11–12, 2010. Its appearance in published form sets it apart from the proceedings of the 1st International Symposium (2006 Utrecht, NL) and the 2nd International Symposium (2008 Portsmouth, UK) which have been made accessible through the Commission’s website only. The publication of this volume was made possible by forging of a new partnership between the International Cartographic Association (ICA) and the international publishing house Springer-Verlag, an agreement which has afforded this Commission the opportunity to present its most recent research findings to a much wider audience. Hoping that this volume would be the first in a series on the history of cartography deriving from future symposia, it might not be inappropriate to also provide some background on the ICA and its Commission on the History of Cartography.

The International Cartographic Association was founded in 1959 and, as the world authoritative body on cartography, it has as its mission the promotion of the discipline and profession of cartography on as wide a scale as possible. The ICA is basically a technical organisation of professional cartographers who are concerned with current aspects of researching, compiling, and producing maps. As historical maps and historical cartographic material are an integral part of any modern cartographic database, the ICA also maintains a keen interest in research on the evolution of modern cartography. It is towards this end that an ICA Working Group on the History of Cartography was formed already in 1972. Since 1979 this Working Group has the status of a full Commission which today encourages the active involvement of all interested researchers and institutions in this field. Further information on the activities of the ICA Commission on the History of Cartography can be obtained from the Commission’s website at www.icahistcarto.org

The history of cartography covers a vast field of knowledge and includes virtually all maps and map-like graphics made by humankind since prehistoric times. Map compilation and map use today are, however, seldom dependent on maps which were produced before early modern times. Taking this into account, the ICA Commission decided to concentrate on the history of cartography since
the Enlightenment and, more specifically, on cartographic developments during the nineteenth and twentieth centuries.

As already mentioned, this volume emanates from the 3rd International Symposium of the ICA Commission on the History of Cartography. As is customary with symposia of this kind, the 2010 conference in Texas had a general theme which, in this case, was “Charting the Cartography of Chartered Companies”. Chartered Companies were decided on as they played an important role in semi-official overseas exploration, trade, expansion, and colonial power. These companies relied upon maps and charts for planning, implementation and operation, and often employed their own surveyors and map making departments. While contributions towards this general theme were encouraged, the symposium was also open to relevant research on other cartographic endeavours than Chartered Companies.

To foster co-operation and also broaden the discussion, the ICA Commission on Maps and Society was invited to join the Symposium in Arlington. This Commission made a contribution from a social sciences perspective as represented in the papers of Peggy Allison, Berenika Byszewski, and the convener of the group, Jörn Seemann. The fact that the Commission on the History of Cartography does not only have a mandate to investigate and put on record the history of paper maps, but also to document the history of Geographic Information Science, manifested in a special exhibition and a paper session at the Symposium presented by the United States Geological Survey. Important contributions by and in association with this institution are the papers by Patrick McHaffie, Lynn Usery, and Dalia Varanka which focus on the twentieth century evolution from aerial to digital cartography.

As is evident from the above this volume contains papers on the general theme of Chartered Companies as well as papers on a wider array of themes within the field of historical cartography. Unfortunately some papers which were presented at the Symposium could not be included. This caveat could, however, be balanced out by the papers of accepted presenters who were unable to present their research personally.

We wish to acknowledge our gratitude to the University of Texas at Arlington, especially Special Collections, for their logistic support, to Prof. Dr. Ferjan Ormeling, Chair of the ICA Publications Committee, and to Mrs. Agata Oelschläger of Springer-Verlag for their kind assistance towards the production of this book.

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Part I
Early Explorative Cartography
Chapter 1
Ferdinand Konšćak – Cartographer of the Compañía de Jesús and his Maps of Baja California

Mirela Slukan Altic

Abstract Ferdinand Konšćak (Fernando Consag) was a Croatian Jesuit and a missionary who carried out the exploration of Baja California according to the order of Compañía de Jesús. In 1730 he was assigned to the missions in Baja California, where he worked until his death. During his missionary work, he made three major research expeditions (1746, 1751, 1754) and made at least two maps of Baja California. His diaries from the first and second trips, in which he gave descriptions of the terrain and the people of Baja California, were published during his lifetime and have been enjoyed even after his death in several editions and in various languages. His map, “Seño de California y su costa oriental,” played a special role after the existence of a California peninsula was officially accepted. Although F. E. Kino and J. de Ugarte had claimed this on their own maps before him, the official position of the Spanish government changed after Konšćak’s research.

In this paper we will present the original versions of Konšćak’s maps of California and later redactions of the same maps on which Ferdinand Konšćak is listed as the author. With their comparisons with later maps based on Konšćak’s template, we will assess his contribution to the cartographic and geographic knowledge of Baja California.

Ferdinand Konšćak and His Work in San Ignacio

Ferdinand Konšćak (Varaždin/Croatia, 2.12.1703 – San Ignacio/Mexico, 10.9.1759), is one of the most famous Croatian missionaries and explorers. He entered the Jesuit Order in 1719. In 1731 he was assigned to the missionaries in Baja California, where from 1732 until his death, he worked in the mission in San Ignacio (he was its principal from 1747). Along with Latin, German, French and Spanish
languages which he knew before, he quickly learned the language of the Cochimí tribe and those of other neighboring tribes in California, which greatly facilitated not only his missionary work with the native Indians, but also his movements around the land, which he managed over the entire time of this research work.¹ In 1746, he began to work intensively conducting the research that would then lead to a comprehensive description of California and its peoples and drawing geographic maps, which would for the first time conclusively prove that California was a peninsula.

The Role of Missionaries and Other Explorers in the Geographic and Cartographic Knowledge of California

In the minds of European explorers, California existed as an idea before it was discovered. The earliest known mention of the idea of California was in the 1510 romance novel, “Las Sergas de Esplandían,” by Spanish author Garci Rodríguez de Montalvo. The book described the Island of California as being west of the Indies, “very close to the side of the Terrestrial Paradise; and it is populated by black women, without any man among them, for they live in the manner of Amazons.”

The first European who reached the present state of Baja California was Fortún Ximénez (?-1533). Sent by Hernán Cortés (1484–1547), he discovered the southern part of Baja California. Cortés himself followed up on the discovery with an expedition to La Paz, but the settlement had to be abandoned soon afterwards. Cortés’s limited information on southern Baja California apparently led to the naming of the region after the legend of California and to an initial, but short-lived, assumption that it was a large island. In 1539, Cortés sent the navigator Francisco de Ulloa (?-1540) northwards along the Gulf and Pacific coasts of Baja California. Sailing north from Acapulco, Ulloa reached the head of the Gulf of California which he named the “Sea of Cortés” in honor of his patron. After he sailed the eastern and western coasts of California, it was clear that there was no passage between California and the mainland. An expedition under Hernando de Alarcón ascended the lower Colorado River and confirmed Ulloa’s findings. Sebastián Vizcaíno (1548–1624) again surveyed the west coast in 1602, but Father Antonio de la Ascension who traveled with him, still claimed that California was separate from the mainland.² According to those explorations, maps published during the sixteenth century, show California as a peninsula. The earliest map of the new land is a hand drawn map for Cortés about 1539.³ After this map, all the

best known maps of the sixteenth century including those by Gerard Mercator⁴ and Abraham Ortelius,⁵ correctly show California as a peninsula (Fig. 1.1).

Subsequently, the first known reappearance of the Island of California on a map dates to 1622 on a map by Michiel Colijn from Amsterdam.⁶ One contributing

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⁴America Sive India Nova, 1595.
⁵Americae Sive Novi Orbis Nova Descriptio Antwerp, 1571.
⁶Published as a title page of “Descriprio Indiae Occidentalis per Antonium de Herrera.”
factor may have been the second voyage of Juan de Fuca in 1592. Fuca claimed to have explored the western coast of North America and to have found a large opening that possibly connected to the Atlantic Ocean – the legendary Northwest Passage. So after nearly a 100 years of California’s appearance on maps as a peninsula, a depiction of California as an island revived in the early seventeenth century. Namely, Colijn’s representation was immediately used by the most
respectable cartographers of the seventeenth century, including Joan Vinckeboons, Nicolas Sanson, Jan Jansson, John Speed, Pieter Goos, Frederick de Wit, Vincenzo Maria Coronelli, and many others (Figs. 1.2 and 1.3).

The Jesuit missionary and cartographer Eusebio Francisco Kino (1645–1711) revived the fact that Baja California is a peninsula. While studying in Europe, Kino had accepted the insularity of California, but when he reached Mexico he began to have doubts. He made a series of overland expeditions from northern Sonora to areas within or near the Colorado River’s delta in 1698–1706, in part to provide a practical route between the Jesuits’ missions in Sonora and Baja California but also to resolve the geographical question. Kino was satisfied that a land connection must exist, so his maps show California as a peninsula. In this regard, his map “Passage par terre a la Californie” based on his research made between the years 1698 and 1701 is particularly important. Although the map was known to a wide circle of cartographers and church authorities, the official statement of Spain that California was an island, did not change. This stance was followed by European cartographers and the view of California as an island was still held until the middle of the eighteenth century in some places (Heinrich Scherer, Herman Moll, and Matthäuss Seutter). This was especially supported by cartographer Herman Moll who claimed that he had personally spoken with one captain who had circumnavigated the island of California (Fig. 1.4).

Expeditions of Ferdinand Konščak

During his missionary work, Ferdinand Konščak made three expeditions. By order of the Jesuit province of New Spain, in 1746, he sailed the Gulf of California to the mouth of the Colorado River. All the way, Konščak and his men carried out measurements from which he drew a map that irrefutably proved that Baja California is a peninsula.

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7 Amerique Septentrionale, Paris, 1650.
8 America Septentrionalis, Amsterdam, 1641.
9 America, London, 1676.
10 Paskaerte van Nova Granada et t’Eylandt California, Amsterdam, 1666.
11 Novissima et Accuratissima Septentrionalis ac Meridionalis Americae Descriptio, Amsterdam, 1690.
12 L’Amerique Septentrionale ou la Partie Septentrionale du Indes Occidentales, Paris, 1689.
13 Provinciae Borealis Americae... Munich, 1720.
14 North America, ca.1720.
15 Novus Orbis Sive America, Augsburg, 1750.
Fig. 1.3  California as island on the map of Vincenzo Maria Coronelli, 1689 (Provided by: Barry Lawrence Ruderman Antique Maps)
During the first expedition, Konščak kept a diary as well. This is a manuscript known as “Derrotero,” which will be published many times together with his famous map.\(^{17}\)

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\(^{17}\)“Derrotero del viaje que en descubrimiento de la costa oriental de California hasta el Río Colorado... hizo el padre Fernando Consag... por orden del padre Cristóbal de Escobar y Llamas, provincial de Nueva España de la Compañía de Jesús; empieza en 9 de junio de 1746.”
On his second expedition, in 1751, he crossed the middle of the peninsula in the area of Sierra Madre mountains and went to the Pacific coast of today’s Guerrero Negro and continued along the coast north to 30° latitude. The localities identified by this expedition, noted and described in his diary “El diario del viaje que hizo el Padre Fernando Consag en 1751,” are not drawn on any version of Konščak’s map. Namely, Konščak’s maps that we know of were completed by 1746. Although Konščak’s diary from this expedition does at many points explicitly mention the field survey, measurements of latitude and compass measuring, cartographic sketches from that expedition have not been found.

Konščak took his third expedition in 1754. The aim was to find the perfect terrain for a new outpost and to expand missionary activity to the north, around future missionary outpost of San Borja. There is no evidence of Konščak’s cartographic work on that expedition.

Eventually, Konščak decided to put his experience and knowledge of all three expeditions into literary form in “A comprehensive description of the people and the end of Lower California,” known as “Descripción compendiosa.” Although “Descripción compendiosa” is not signed, we know that the author of this manuscript is Ferdinand Konščak. Namely, the handwriting of “Descripción” has an addition under the title “Addiciones a las noticias contendidas el la Descripción compendiosa de lo descubierto y conocido de la California.” On two copies of “Addiciones” there is a subsequent note that speaks of Konščak in the third person, and it explicitly states him as the author of “Descripción compendiosa.”

Konščak’s Hand Drawn Maps of California

Based on the first expedition, Konščak, in 1746, compiled his first map that shows part of the peninsula which he had visited. He carried out extensive measurements which confirmed the title in his diary, “Report on the trip which was to survey the eastern coast of California to its eventual limits with the Colorado River complied by Father Fernando Consag…” It is a hand drawn map, a copy of which, based on Konščak’s original, was made by California missionary Pedro Maria Nascimben (1703–1754) under the title of “Seno de Californias Y su Costa Oriental nuevamente descubierta y registrada Desde el Cabo de la Virgenes basta su Termino

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18This manuscript, duplicated in multiple copies, exists today and was published in O’Crouley Pedro Alonso. 1775. Ydea compendiosa del Reyno de Nueva Espagna. Ciudad de Mexico.
19Unfortunately, that part of the manuscript is preserved in the subsequent transcript from March 1791.
que es Rio Colorado por el P. Fernando Consag de la Compañía de Jesús Missionero de Californias 1746 (Fig. 1.6)."21

We can learn something about his work on the maps from the text of his diary. For example, on the way he did not perform measurements of latitude (note dated 25th July), but he knew the exact position of individual sites (on 9th June, states that he started from San Carlos, located at 28° northern latitude). From this we can conclude that he used the map of some of his predecessors, which had a coordinated grid. By all accounts, this was the map of California made by Eusebio Francisco Kino, probably Kino’s version from 1701. Namely, the spatial extent and content of Kino’s map largely overlaps with Konščák’s hand drawn maps from 1746.22 However, there are also many differences – Kino’s map extends south to 25° latitude and north to 35° and Konščák’s covers the area between 27° and 33° 30’ (Fig. 1.5).

So, Konščák undoubtedly utilized Kino’s template. On this template, he had to insert new toponyms, and correct Kino’s errors, especially those related to the contours of the land in the Northern Gulf of California, as well as those pertaining to the islands inside the California Sea (Mar de Californias). The scale of Konščák’s map is expressed in Spanish and French miles, the measurements also used by Kino, and the geographic grid is indicated only for latitude. However, there are differences in the latitude of which they both indicate the scale along the left edge of the map. San Ignacio, on Kino’s map, was located at approximately 27° northern latitude and on Konščák’s, it was drawn at 28°. So, between their measurements of latitude, there is a difference of about 1°, but Kino’s accuracy is better (Konščák’s measurements had a constant error of about 1°).

All toponyms mentioned in Konščák’s diary are, in fact, noted on his map for the first time. Namely, Kino only generally noted the names of peaks in the hinterland for Lower California and the names of only a few missionary outposts. Most of the toponyms on Konščák’s map refer to the names of bays, capes and islands and only a few colony names. He highlighted the localities of sources of drinking water (aquaje) with particular attention. As with Kino’s, Konščák’s map shows a very schematic method of molehills to show the relief of the land. The coastline on Konščák’s map is very indented and shown with a lot of detail in relation to the generalized view that is found on Kino’s template. Konščák’s particularly enhanced representation of the entire northern Gulf of California with the wetlands of the mouth of the Colorado River are, for the first time, accurately mapped on his map. Konščák also achieved significant progress in the description of the island of Isla Angel de la Guarda and the other islands of the California Sea (his map is the first to note the existence of a rocky island in front of the Bay of San Felipe, which today is named after him, Isla Consag). Many places which, until that time, had not been

21Huntington Library, San Marino. One example under the same title is in the British Library.
22Mapa del paso por tierra á la California y sus conñiantes nuevas Naciones y Misiones nueva de la Compañía de Jesús en la America Septentrional, Descubierto andado y demarcado por el Padre Eusebio Francisco Kino, jesuita, desde el año de 1698, hasta el de 1701.
marked on maps received names: Purgatorio Bay, San Juan de Pablo, San Pedro y Pablo, and San Felipe de Jesus; whilst many others, which already had names, appeared for the first time on the map.

Besides the aforementioned hand drawn maps of the eastern coast of the peninsula, there are also a few hand drawn copies of Konščak’s maps that show

Fig. 1.5 Map of E. Kino, 1701 (Provided by: Barry Lawrence Ruderman Antique Maps)
the whole of the peninsula and which later served as a template for Burriel’s printed version of the map. This and all its other variants carry the same title as the previously described map which depicts only the east coast of California. However, since it is clear that the map of the east coast came into existence during the expedition of 1746, with the hand drawn map which shows the entire peninsula, there remains something unknown. Namely, the map is dated in 1746, from which it can be concluded that Konšcák also mapped the southern part of the peninsula by
that year, but we have no direct evidence of that. It is known that after arriving in
San Ignacio, Konščak traveled the peninsula conducting visits or going to neigh-
boring missions, especially Loreto. However, for that period of his work between
1732 and 1746, we have no confirmation that could decisively tell us about his
cartographic work in that part of the peninsula. His diary describes the southern part
of the peninsula, which indicates that this part of California was well known to him,
but mapping is not explicitly mentioned. Therefore, it remains to be confirmed
whether the representation of the southern part of the peninsula was the result of
Konščak’s mapping, or whether it was taken from the maps of his predecessors.

Comparing the maps of his predecessors, especially those of Eusebio Kino, it is
immediately visible that Konščak’s map of the southern part of the peninsula has
many more details in showing the configuration of the coast and islands through the
numerous toponyms. So Kino’s map of the southeastern part of the peninsula from
1689\(^\text{23}\) or the map “Nuevo Navara” from 1710\(^\text{24}\) would have served him only as
basic orientations, nevertheless the data on Konščak’s map is obviously the result of
detailed personal field observations. This can be confirmed by the comparison of
toponyms that Konščak’s “Descripción” contains. Namely that manuscript contains
a series of toponyms that Kino did not mention and that all appear on Konščak’s
map. In this way, the text of “Descripción” provided the key to the definitive
confirmation that Konščak personally carried the research of the southern part of
Baja California and on the basis of which he mapped that part of the peninsula
(Figs. 1.7 and 1.8).

It is interesting to note the fact that the copy of the hand drawn maps preserved in
Seville feature very few noticeable corrections from its author or copyist
(Nascimbien?). In this way, the names of several rivers on the west coast of the
peninsula were corrected. It is also notable that, in the far south of the peninsula, the
names of several marked missions are missing – alongside the San Jose de Cabo
mission with a church symbol is only noted “Mission” and in the position of the
Santa Rosa mission is only drawn a church symbol without any inscription.
Therefore, the map seems to be an unfinished work. However, every toponym
that we come across on Konščak’s map of the east coast of California was also
literally assigned on his map of the entire peninsula. This additionally confirms
Konščak’s authorship of all of the data on the hand drawn map of Baja California
from 1746.

Konščak’s map “Seño de California y su costa oriental” played a special role after
which it was officially accepted that a Californian peninsula existed. His map of
California was evaluated by the Spanish court and, on that basis, it was officially
concluded that California was a peninsula. Although F. E. Kino and J. de Ugarte had

\(^{23}\)Delineacion de la Nueva Provincia de San Andrés del Puerto de la Paz y de las Islas
circonvecinas de las Californias ó Carolinas que al Excmo. Señor Conde de Paredes, Virrey de
la Nueva España dedica y consagra la Mission de la Compañía de Jesus de dichas Californias ó
Carolinas en 21 de Diciembre día del Glorioso Apostol de las Indias S. & Thomas, de 1689.

\(^{24}\)Nuevo Reyno de la Nueva Navara son suos confinantes obros Reynos 1710.
Fig. 1.7 Map of peninsula by Kino, 1702, in Venegas-Burriel (Source: Burrus, 1967)
Fig. 1.8 Map of peninsula by Konščak, published in english version of Venegas-Burriel
(Provided by: Barry Lawrence Ruderman Antique Maps)
claimed this finding on their own maps before him, the official position of the Spanish government changed after Konščak’s research and the publication of his maps.

His map, together with his diary known as “Derrotero,” was printed in the Venegas-Burriel’s book “Noticia de la California” (first edition published in Madrid, 1757). Namely, in order to prepare the work and corresponding maps of California, Burriel employed the help of Pedro Maria Nascimben for the purpose of making multiple copies of both Konščak’s maps. Based on these copies, Burriel gave shape to two copper plates of the maps, one that showed only the east coast and the other showing the whole peninsula. The first plate that shows only part of the peninsula was left with its original title, “Seno de Californias . . .,” but this was changed in 1747. The map that showed the whole of the peninsula was given the title “Mapa de la California, su golfo y provincias fronteras en el Continente de Nueva Espagna” and dated 1757. This map, on which he decorated its outer edge with elaborate engravings of the animals and natives of California, is one of the most beautiful maps of the time. Various versions of Konščak’s maps are included in all later editions of Venegas-Burriel’s works, as well as many other widely distributed books at the time, such as “Nachrichten von der Amerikanischen Halbinsel Californien,” by Jesuit Jacob Bagaert (Manheim, 1772), “Storia dela California” by Mexican Jesuit Francesco Clavigero (Venice, 1789) or Denis Diderot’s monumental work “Encyclopedie” (Paris, 1772).

Authorship over “Addiciones” and Three Sketches of the Southern Part of the Peninsula

As we have noted, in “Addiciones” it explicitly states Konščak’s authorship over “Descripción,” but the author of “Addiciones” is clearly not mentioned. Seeing that they are, as in the case of “Descripción” and as in the case of “Addiciones”, only preserved transcripts, it is not possible to say whether both of the original manuscripts were written by the same hand or by the same author. “Addiciones” contains valuable information about Californian flora and the customs of the natives and, in this sense, the text continues in “Descripción.” At the end of the text, on separate sheets of paper (but written by the same copyist), there are three sketches: one of the tip of the peninsula with Cabo San Lucas, one of the broader belt of the California Bay around the Loreto outpost, and the third of the Pacific coast around the outpost La Purisima. The manuscript had to have originated no later than the start of 1759 because the entire “Addiciones,” together with the sketches of 14th

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25Seno de California, y su costa oriental nuevamente descubierta, y registrada desde el Cabo al las Virgenes, hasta su termino, que es el Rio Colorado año 1747. por el Pº Ferdinando Consag de la Compº de IHS, Mission en la California.

26Mapa de la California, su golfo y provincias fronteras en el Continente de Nueva Espagna. Is. Pen˜a sculp.1757. It was released in the first volume of Burriel’s works.
April 1759, were sent to Marcos Burriel by the then–Californian visitor Juan de Armesto as a supplement to the new edition of “Noticia de la California.” Unfortunately though, the materials arrived too late (Fig. 1.9).27

Given the dating of such manuscripts, Aschmann, in his analysis concludes that the author was also probably Konšćak.28 From the comparison of three sketches that show the same areas as Konšćak’s map of peninsula, it is evident that the sketches contain more detail and toponyms than the map of 1746. However, the sketches, together with the manuscripts of “Addiciones,” could really have been drawn by Konšćak. Perhaps he was dissatisfied with the accuracy of his map in his later years. In that case, the three sketches of the southern part of the peninsula would be a kind of supplement to his map.

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27The letter is preserved in the Manuscript Collection, Huntington Library, San Marino.
The Influence of Konsćak’s Maps on Later Cartographic Representations of California

Thanks to the spread of Burriel’s works, Konsćak’s maps quickly became invaluable to foreign cartographers across the world. Those who did not use it literally, used it to complete their own maps. One of the first who evidently used Konsćak’s map to complete an old version of Kino’s map was Isaak Tirion. On his map of New Mexico and California from 1765, the representation of the peninsula is entirely taken up with Konsćak’s map (this is particularly evident in view of the mouth of the Colorado River and in the representation of the Bay of La Paz in the south of the peninsula). In this sense, Tirion’s map is one of the most successful compilations of Konsćak’s and Kino’s research (Fig. 1.10).

The great explorer Alexander von Humboldt also used Konsćak’s information. In representing the California peninsula on his map “Carte Generale du Royaume de la Nouvelle Espagne” from 1804, Humboldt also had to use the newest compilation of the areas which were still remaining on Konsćak’s map. Namely, although Humboldt mentioned that he created the map according to his observations, it is known that Humboldt during his own Latin American expedition of 1799–1804 did not visit California, so for the description of that area he used someone else’s maps. It is the same case with the description of California on Aaron Arrowsmith’s map “A Map of America” from 1805, which Humboldt claims was a copy of his map.

Ferdinand Konsćak was one of the most prominent Croatian missionaries and explorers. He spent a full 27 years in California, tirelessly working not only on research but also on improving the living conditions of the local people. Thanks to his modesty, he gained great respect and honor during his life. His diaries and maps were handed to the most eminent historians and travel writers throughout the world, and his work, was published in at least six languages during the eighteenth century. Officially proving the nature of California as a peninsula, his map became one of the most widely reproduced maps of the area and gave him a prominent place as one of the most important cartographers of California.

29 Kaart van het Westelyk Gedeelte van Nieuw Mexico en van California Volgens de laatste Ontdekkingen der Jesuiten en anderen/Isaak Tirion, Amsterdam 1765. The map was included in Tirion’s well-regarded Nieuwe en Beknopte Hand-Atlas.

30 Carte Generale du Royaume de la Nouvelle Espagne depuis le Parallele de 16° jusqu’aau Parallele de 58° (Latitude Nord) . . .


32 Humboldt, 174.
Biographical Note

Mirela Slukan Altic is a research advisor in the Institute of Social Sciences Zagreb, Croatia, where she works as a Head of the Centre of Urban and Local History. She specializes in historical geography, historical cartography, urban and local history. At the Department of History of the Faculty of Philosophy, University of Zagreb, Dr. Altic lectures on “Introduction to the Reading of Historic Maps” and “Cartographic Sources for European and Croatian History”. She is also participating in education at postgraduate studies at the Department of History. Occasionally, Dr. Altic teaches in universities in foreign countries. She has been the head of Croatian national project, “Historic Towns Atlas,” since 2003. She is also the author of 12 books, including five volumes of the Croatian Historical Towns Atlas. In 2004, she won the annual prize for science for her book “Historical Cartography: Cartography Sources in Historical Sciences”. Dr. Altic is a member of the ICA Commission on the History of Cartography.
Chapter 2
The Caribbean Cartography of Samuel Fahlberg

Dennis Reinhartz

Abstract  Swedish born in Halsingland and educated in Stockholm, Dr. Samuel Fahlberg (1758–1834) came to the Caribbean to the island of St. Barthélemy (“St. Barths”) in 1784 as a physician and Government Secretary when it was relinquished by France to Sweden. Two years later, he became the Provincial Medical Officer and the Customs Inspector and Cashier, and in 1803 he also became the Director of Survey of the tiny colony and mapped it extensively for the Swedish West India Company. But because of the ongoing problems between Sweden and France over the island and his too close an association with the island’s pro-British faction, Fahlberg eventually was forced to flee under threat to “lose his life, honour, and property” to the neighboring Dutch islands of St. Eustatius (1810–1816 and 1829–1834) and St. Maarten in (1816–1829). He remained in St. Maarten and St. Eustatius (“Statia”) as a doctor, surveyor, cartographer, architect, and artist for most of the three remaining decades of his life until his death in St. Eustatius in 1834. During these years, Fahlberg produced several excellent and important maps of these Caribbean islands and their towns, plantations and estates, and fortifications.

The Life and Times of Samuel Fahlberg

The information regarding Samuel Fahlberg’s early life is sketchy. He was born the son of a farmer in the area of Halsingland in Sweden on 5 September 1758. After the death of his father and a twin brother in 1769, he and his mother sailed for

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1I am indebted to Elsje Bosch, Director of the Sint Maarten National Heritage Foundation and Sint Maarten Museum in Phillipsburg, for her conversations with me about Fahlberg and his work and for her sharing of rare biographical information on him with me.

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Stockholm to make a living. Along the way they were shipwrecked; his mother drowned, and he barely survived by clinging to some ice.

Upon his arrival in Stockholm, Fahlberg was taken in by Jacob Tjader, Supervisor of Public Baths and Borough Medical Officer, and made his apprentice. Apparently appreciating his intellectual ability, Tjader enrolled Fahlberg in college to study botany and pharmacy under Bergius. He followed this up with an internship in surgery with Olaf of Acrel at Serafimer Hospital where he passed his examination to become a qualified surgeon in 1782.

Fahlberg’s first real employment was as a surgeon on a merchant ship. Eventually, he traveled to France where he signed up with the fleet of Jean François de la Perouse bound for North America where he was wounded in a battle with the English in Hudson’s Bay. In 1784, he returned to Stockholm to become a deputy surgeon at the Serafimer Hospital.

In 1784, France ceded the West Indian island of St. Barthélemy (“St. Barths”) to Sweden in exchange for trading rights at Gothenburg (Sweden sold it back to France in 1878). During the selection process for personnel to administer the new colony, the Swedish government and Svenska Västindiska Kompaniet (Swedish West India Company) gave preference to individuals who had some familiarity with the New World. Consequently, in December 1784 Fahlberg was appointed as a government secretary and physician to St. Barthélemy. Two years later he traded in his government secretary position for one as a customs inspector and cashier. At about this time, he also married his first wife Elizabeth Siwars. She died in 1798, and in 1801 he married Elizabeth Evory from the Dutch island of St. Eustatius (“Statia”). Since the island was temporarily (March 1801–June 1802) in British hands, the wedding ceremony was performed by the British governor. In 1805, Fahlberg was reappointed as a government secretary and served in all three positions until he departed the island in 1810.

As a doctor on the island, Fahlberg helped to combat several epidemics, including small pox. He also functioned as an unpaid surveyor and naturalist. By 1803, he was appointed an island engineer with the title of Director of Survey, and eventually, his maps came to the attention of the Swedish government, the Swedish West India Company, and Academy of Sciences in Stockholm.

During this period, Fahlberg also must have wandered the Caribbean and Gulf of Mexico extensively for he collected historical artifacts and natural specimens from Trinidad, Venezuela, and elsewhere for the Academy of Sciences and the University of Uppsala and corresponded with important Swedish scientists and other intellectuals. Some of his articles were published in the Academy’s Lakaren Och Naturforskaren, and a butterfly, tortrix Fahlbergiana was named after him. Fahlberg was granted a doctorate from the University of Uppsala in 1796.

The political situation on St. Barthélemy was quite stressful during the era of the French Revolution and Napoleon. While Fahlberg may have favored the American and French revolutionaries early on, over time his attitudes changed somewhat. St. Barthélemy’s population was divided into pro-French and pro-British groups.