

M. Carme Montaner – Anna Maria Casassas

Between Science and Spying: Maps of the Northern Africa and Near East in the Works of Ali Bey el-Abbasi (1766-1818)

Abstract

In 1814 there was published in Paris the *Voyages d'Ali Bey el Abbasi en Afrique et en Asie pendant les années 1803, 1804, 1805, 1806 et 1807*, a travel book based on scientific erudition and hazardous story by halves, in the way of the literary tradition between the Enlightenment and Romanticism. Traveller, explorer and secret agent in the service of the Spanish and French governments, Ali Bey was named Domènec Badia i Lebllich and was from Barcelona. The first edition of this book was published accompanied by an atlas containing maps of Morocco, the Red Sea, the Near East and a general map of the northern part of Africa, as well as small maps of cities and it constitutes a remarkable contribution to the cartography of the South River of the Mediterranean at the beginning of the 19th century. This paper offers an approach to the study of the maps in the Ali Bey works, analysing the information sources, the technical processes and the scientific and social contribution in its context.

The Spanish traveller Domingo Badia went over Northern Africa and Near East countries between 1803 and 1807 camouflaged as an Arab prince named Ali Bey. During his travel, Badia carried out remarkable maps of some of these territories, including the first known map of La Mecca made by a non-Muslim person. In 1814, the "*Voyages d'Ali Bey el Abbasi, en Afrique et en Asie, pendant les années 1803, 1804, 1805, 1806 et 1807*" were published in Paris in three volumes, accompanied with an atlas with a lot of maps, plans and views. Since then, a lot of editions of the mentioned books have been published in different languages, but an in-depth study of the Badia /Ali Bey maps has not been undertaken yet. In this paper we attempt to make a first approach to Badia's life.

THE AFRICAN INTERESTS OF THE SPANISH CROWN BETWEEN THE 18th
AND 19th CENTURY

At the end of the 18th and the beginning of the 19th century Spain lived an unstable political period that was worsened by the invasion of the French troops in 1808. The beginning of the loss of the American continental colonies coincided with the moment in which new forms of European dominance began to be imposed, and which would lead to the triumph of imperialism. Europe hoped to make an old dream come true, i.e. by taking over the countries of Maghrib and the Middle East in order to assure the control of those markets and consequently have shortest and safest routes for the Eurasiatic commerce. Although Spain had lost its predominance in this new period of colonialism, there were some reasons to look at the near African territories as the American colonies became independent.

Ever since medieval times the Spanish crown had had possessions in the North of Africa and maintained commercial relations with the Sultanate of Morocco. Basically, the relations were based in the fishing industry (as it is the case today), but there were also other reasons such as importing wheat during periods of poor harvests in the peninsula. At the turn of the 18th to the 19th century problems escalated. The last Peace, Friendship, Navigation and Commerce Treaty, signed by Spain and Morocco (1799), and the provocation of revolts in prisons situated at the North African possessions, made Spanish politicians decide that there was a need to change the type of relations with their neighbouring government on the other side of the Mediterranean. It is within this context of change of the domination system, from colonialism to imperialism, and of the bilateral conflict between Spain and Morocco that the traveller Domingo Badia can be placed. He persuaded the prime minister of king Charles IV, Manuel de Godoy (1767-1851), to finance his travel to Africa, in a moment characterized by the inability of the Spanish crown to design an efficient and coherent foreign policy towards Morocco.



fig. 1: *Portrait of Ali Bey*
published in the 1892 Catalan edition of the Atlas of Travels.

DOMINGO BADIA'S PROPOSAL

Domingo Badia Leblich was born in Barcelona in 1766. Although there is few information about his life, it is known that he studied at the Junta de Commerce de Barcelona and at the University of Valencia, where he met the Botanist, Simòn de Rojas Clemente Rubio (1777-1827). Badia was surely influenced by this prestigious Spanish naturalist and scholar of oriental languages, as they planned a first journey to Africa together. Nevertheless, later Rojas Clemente withdrew from the project.

Badia, following the family tradition, went into the Crown Service at a very young age. At the same time he showed an interest for scientific questions, such as geography, meteorology, astronomy, as well as ethnography, linguistics and Arabic culture. His restlessness as an observer and a relatively easy access to the highest spheres of the government led him to present in 1803 a "Project for the Exploration of the Muslim World." We do not have the entire written proposal, but some manuscript papers are preserved at the Arxiu Històric de la Ciutat de Barcelona. Unfortunately, among these papers it is

mentioned a "Rapport of maps of Africa" that has not been found. In contrast, there are some manuscripts that describe the cartographic instruments Badia had to buy to draw the expedition maps.

Badia proposed a scientific plan to discover the African territories from Morocco to Mauritania and as far as present-day Ghana. From there he wanted to cross the whole equatorial Africa until Kenya and the island of Zanzibar, returning northwards and crossing the Sudan and the Argeli desert until Tripoli. Below, we will see how this route practically does not coincide with the one he actually took. The plan included the results of meteorological, ethnic, geographic, botanic and -what interests in this case-, topographic observations with calculations of longitude and latitude and maps. It was a typical scheme for a journey and it seems to have taken its inspiration directly from the Mungo Park journey, published in 1799, which was known by Badia. It was precisely on Major Rennell's map, published in Mungo Park's book, that Badia planned his expedition. The project also included some of the aspirations of the geographers of that period: finding the source of the Nile, verifying the course of the river Niger or bringing back data about the city of Timbuktu, the Saharan metropolis believed to be immensely rich.

Despite the expedition was planned as a scientific journey, there were also political objectives, which evidently were not set out in the project. Nevertheless, the diary of the Spanish Prime Minister Godoy contains some letters, which give us an idea about them. Badia proposed a "Project for the Conquest of Morocco" by instigating an insurrection in the tribes of the South of the Atlas mountains against the Sultan with the strategic and material support of the Spanish government as a way to submit Morocco under the Spanish domination.

Badia managed to convince the prime minister Godoy to finance the journey and next began to prepare it conscientiously. As for cartographic aspects, we know that he went to Paris, where he unfolded the scientific aim of his journey to the Bureau de Longitudes. There he took notes of the geographical and nautical

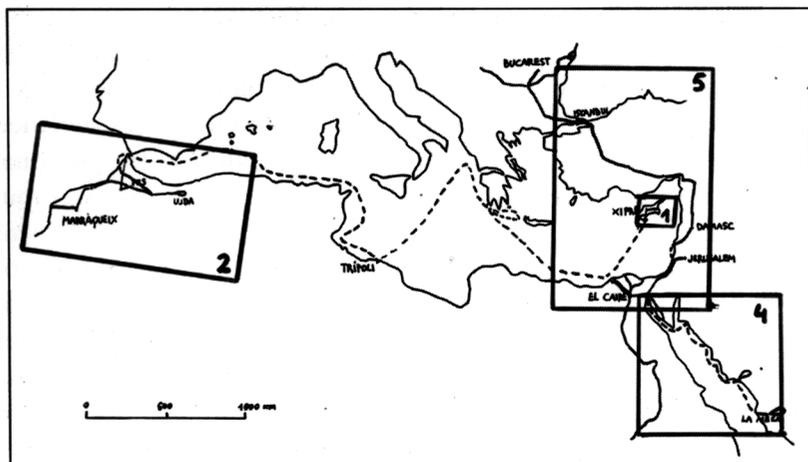


fig. 2: *Itinerary of the Ali Bey's Travel through the Mediterranean and situation of the general maps. Numbers according to the list "General maps enclosed in the Atlas."*

points that the French Institute were interested in order to obtain more accurate observations. It is said that he made contact with French scientists like Lalande, Méchain, Defontaines, Lamark, etc. He also travelled to London, where he was introduced to Nevil Maskeleyne Hamilton, Ayton and above all, Joseph Banks, an active member of the 'British Association for the Discovery of the Interior parts of Africa'. This Association was founded by a group of Englishmen with a scientific aim, but also with the purpose to search into the economic exploitation of Africa. In London, Badia also bought some cartographic instruments to carry out the topographic measurements.

With all this information and the most recent African bibliography, Badia set off on his journey, with the single political backing of Godoy. The expedition lasted 5 years from 1802 to 1807 and turned out to be very different from the one previously planned. In order to accomplish his aims, Badia passed himself off as an Arab prince, Ali Bey el-Abassi. Curiously, when Badia returned to Europe, he rejected his true personality and signed himself as Ali-Bey, so that not until the middle third of the 19th century his real name became known.

THE ALI BEY SUCCESS AND FAILURES

We have to point out that Badia was incapable to carry out a political project of that magnitude with such poorly defined objectives. He was a solitary traveller, who held personal aspirations together with governmental ambitions without support. As a secret agent, he was a complete failure. He was neither prepared, nor had the backing to perform any kind of revolt. Despite introducing himself to the court of the Sultan of Morocco, he did not manage to cross the Atlas, in fact he never got beyond Marrakesh. Once Badia accepted the political failures of his journey, he changed direction and headed towards the Orient instead of southwards. It seems as the prime minister, Godoy, was keen on Badia to go towards Egypt for strategic reasons. Egypt was considered the gateway to Orient. It was clear that, whoever got under Egypt, would control the commerce with India and the Near East, as the fight between the English and French showed. The Spanish crown could do very little in that disproportionate fight, despite the interest of Spanish, and specially Catalan, companies at that time in commerce and the consolidation of the route towards the Philippine Islands colony. Badia's new role, however, was different from that in Morocco. From now on he limited himself to the tasks of a traveller looking for exoticism. Moreover, it is precisely in this stage that he became famous with the drawing up of the first modern maps of Mecca, known to have been made by a Westerner. This turn of direction and intention in his journey is clearly reflected on his cartography.

As a traveller he achieved good results. He made valuable descriptions of the places he visited. He collected a lot of highly reliable topographic, naturalist, ethnological, archaeological and linguistic material. He was the first to localize numerous geographical landmarks. He drew up very detailed maps and described hundreds of exotic animals and plants. Remarkably, this Moroccan stage was the most fruitful concerning to cartography and all other observations he made, including a detailed level of description far beyond that of pure science.

Badia published his journal and observations of his journey quite a few years later in Paris. Political reasons led him to move to the French capital. With the Napoleonic invasions of the Iberian Peninsula in 1808, Badia was named a "afrancesat," that is, the one who supported the French during the Peninsular war. The defeat of Napoleon in Spain in 1814 led him to move to Paris, where he became a colonial agent of the French government. He died in 1818 in Damascus, on his way to India, under uncertain circumstances.

It was in Paris, where he managed to publish the observations of his journey, which were to be widely read and translated into many languages. The prestigious editor F. Didot was in charge of the editing. The work had to be made up of three parts: the descriptive and scientific parts and the atlas. Unfortunately, the scientific part, bounded to provide interesting cartographic data, was never published and cannot be located.

The descriptive part of his work is faultless. As Juan Barceló points out, "Badia combines scientific travel, intriguing tales, quite passionate adventures and a romantic journey in a magnificent book, with exceptional and valuable results for the readers of that period, especially scientists and the military. He includes the best geographical description of Morocco up to the 20th century, a magnificent description of the ruins in Cyprus, the first crossing to Arabia, which was published first-hand in the West (including his pilgrimage to Mecca), as well as the description of Palestine. This part has been translated into many languages and the travellers, who are our immediate ancestors, knew the book."

The atlas was edited with great care including extraordinary engravings. It contains three types of illustrations: maps on a small scale, plans of small places or buildings, and views and drawings. The plans reproduce places of archaeological and ethnographic interest. It is worth highlighting the series of plans of the archaeological ruins on the island of Cyprus. Badia stayed on the island for two months, officially due to a shipwreck, unofficially, it seems, just to stay unnoticed. His most famous

plans are those that survey the sacred Islamic site of Mecca and, as we pointed out, turned to be the first modern plans drawn by a Westerner. The atlas consists of 40 views, 26 plans and building elevations, 19 drawings of objects, inscriptions etc... and finally 5 maps, 4 of which are drawn by Badia: Morocco, Cyprus, The East Mediterranean, The Red Sea and one of North Africa drawn by Major Rennell in 1798 and published in the travel book "Mungo Park."

THE ALI BEY OR BADIA MAPS

Among the 4 maps drawn up by Badia we distinguish two groups: the map of Morocco and the corresponding maps of the East Mediterranean and the Near East.

The drawing up of the Morocco map was completely a part of the initial travel plan and complies with the facet of being a traveller, but also with that of being a colonial agent in the service of the Spanish crown. Badia prepared this aspect of his journey very well, which is demonstrated by the fact that in his reports he shows knowledge of the most recent cartography of this territory. Hence, he had examples of the accurate map of the Moroccan coast drawn up by the Spanish Armada in 1787 and a map drawn by the diplomat L. de Chénier and published in his *History of the Moroccan Empire* in 1787. Badia, therefore, had a good knowledge of cartography and knew how to evaluate the cartography he had at hand. A proof of it is the fact that he did not use the map of Tomas Lopez, one of the most well known Spanish cartographers of the time, but also an author of maps with little geographical precision.

The contribution of Badia to the map of Morocco is based on two aspects: geodesic measurements, taken by himself, and the inclusion of geographical discoveries, together with the most recent data he could collect before leaving. We know that he pinpointed the latitude and longitude of 11 places in Morocco. He also counted on a 12-inch reflecting circle made in London by Troughton, a 2.5 ft Dollond achromatic telescope, a Brooksbanks, as well as a Pennington chronometer. According

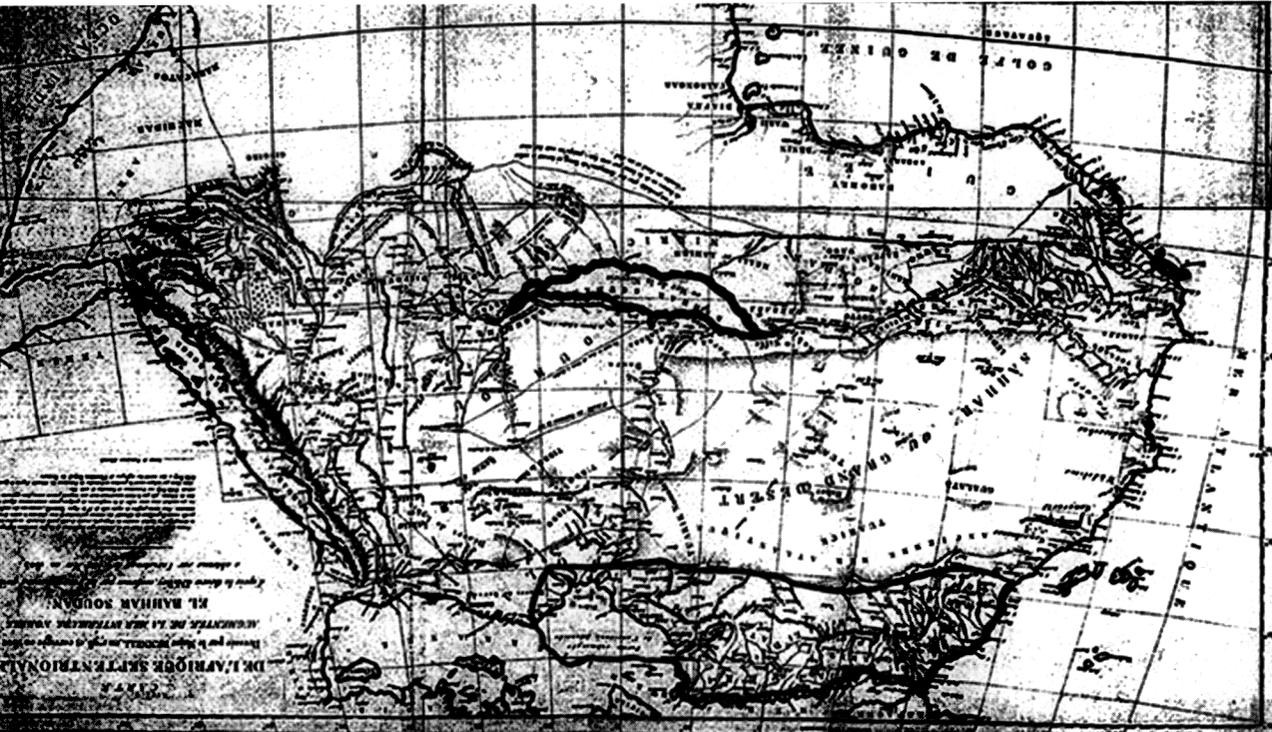


fig. 3: Carte de l'Afrique septentrionale dressée par le Major Rennell, en 1798, et corrigée en 1802, augmentée de la mer intérieure nommée el Bahhar Soudan d'après la théorie d'Ali Bey, confirmée par les renseignements qu'il a obtenus sur l'existence de cette mer en 1805. Gravé par Adam aîné; écrit par G.T. Adam. [1:11 500 000 approx.]. 39X69 cm. Atlas des voyages d'Ali-Bey. Paris: Didot l'Ainé, 1814. Map [3].

to the same map, Badia had personally drawn 9 itineraries as a basis for this work, which we have not localized. Considering his geographical discoveries and geodesic estimates, we found that Badia is the author of one of the best 19th century descriptions of the kingdom of Morocco. Amongst all, the discovery of the Corridor of Taza, later known as the South Riff Strait –a valley that separates the Riff mountains from the Atlas mountains–, is the most spectacular one.

All this information, edited in Paris by Didot, results in a quite detailed map of Morocco in comparison with the maps included in his journal. In fact, it could be said that Badia provided the Spanish government with an strategic document.

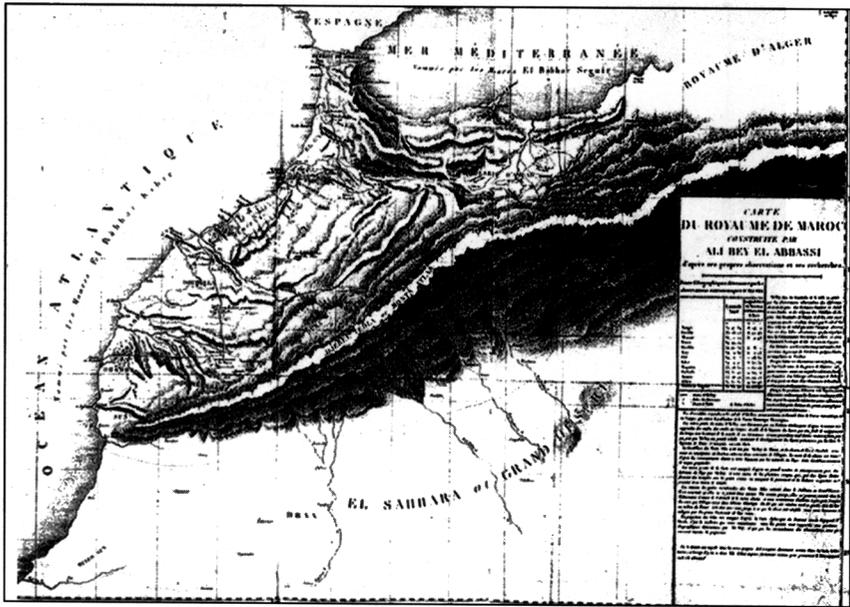


fig. 4: Carte du royaume de Maroc construite par Ali Bey el Abbassi d'après ses propres observations et ses recherches. Gravé par Adam Ainé; écrit par G. T. Adam. [1:1 950 000 aprox.]. 49X69 cm. Atlas des voyages d'Ali-Bey. Paris: Didot l'Ainé, 1814. Map [2].

If we take into account that the rest of the political objectives were not accomplished, this map consists of the best geostrategic contribution of the traveller. Finally, however, for political reasons Badia ended up publishing in France. This map of Morocco is, without a doubt, Badia's great personal contribution and especially Spanish cartography's contribution, to the knowledge of Africa during the 19th century.

As a complement to the African part of his work, Badia put forward two geographical theories. Nevertheless, he could not prove them, as he was unable to continue on the planned route (he did not go further than Marrakesh) and so, only a brief explanation is given. On one hand, Badia believed that the Atlas mountain range was the remain of the ancient continent of Atlantida, when the Sahara desert was a sea (physical data, salinity and sand type and even semantic data, e.g. Atlas - Atlantida, was included). The other theory refers to a great sea

in the interior of Africa, called "Mar de la Nigrícia" that he obviously could not prove (the mystery of this interior sea of Chad attracted many European travellers throughout the 19th century: Denham, Clapperton, Vogel, etc...). Notwithstanding, Badia drew the possible extension of Atlantida, as the interior sea, over Major Rennell's map, which he considered to be one of the best maps of Africa published at that time.

The other three maps, which Badia drew up during the second part of his journey differ considerably from the map of Morocco. Firstly, as the new route to Egypt and the Red Sea did not form part of the official project, Badia did not collect any kind of information about these territories. As a result, he talked neither about the French work in Egypt nor about any other source of cartographic information. Therefore, Badia was less well prepared, when he started on the second stage of his journey. Despite this, he continued taking geodesic measurements and drawing up maps of some zones. Apart from a few measurements in Egypt, Badia went on to Cyprus, where he drew up some interesting plans of the most outstanding archaeological sites. The map of the island was far less outstanding in comparison with these archaeological maps. As the Cypriot researchers Hadjipaschalis and Iacovou pointed out, Badia's Cyprus map was far worse than others of that time, even though it was taken into account in drawing up the best map of the island from the mid 19th century, made by L. De Mas Latrie and published in Paris in 1862.

The fourth map referring to the Western Mediterranean is very general and it is known that Badia had hardly travelled this area, which suggests that the map must have been a compilation of various sources. The accurate descriptions of Syria and Palestine does not include any maps due to the fact that part of his instruments were broken and others had remained in Egypt. The map of this area, therefore, is basically an illustrative map of the route he took.

The last one is the Red Sea map and it has the peculiarity that allows to see how Badia worked, so much so that the original is preserved in the Map Library of the Institut Cartogràfic de

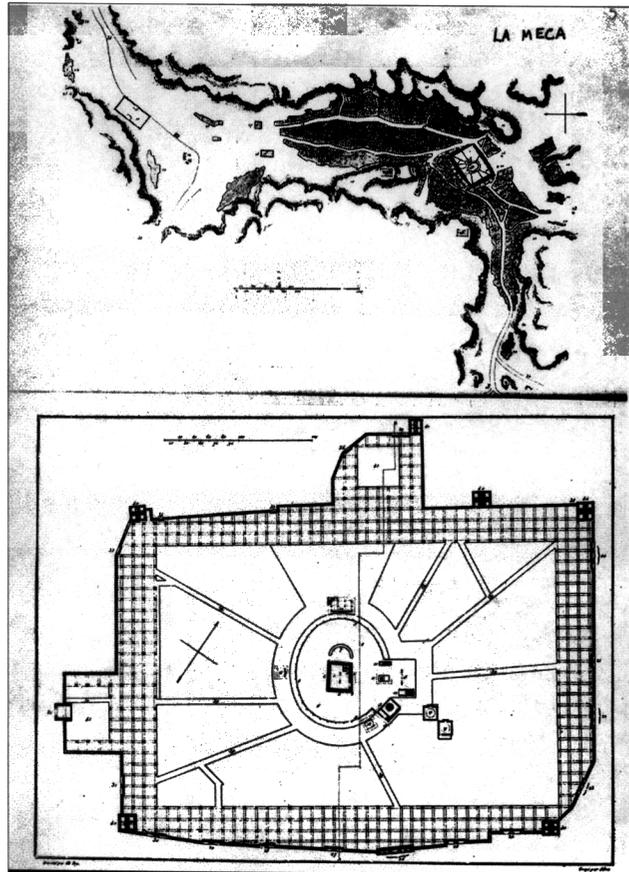
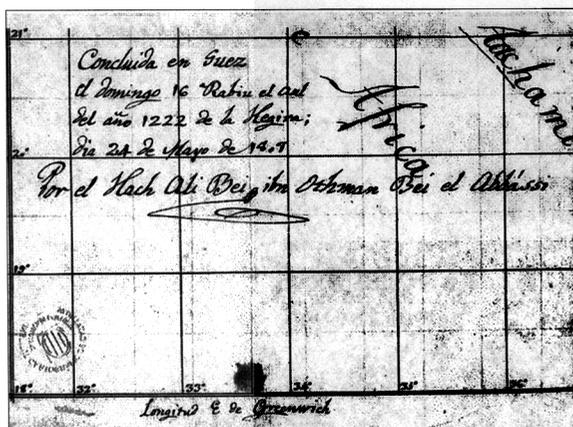


fig. 5 Map and plan of Mecca. *Atlas des voyages d'Ali-Bey*. Paris: Didot l'Ainé, 1814. Pictures XX.

Catalunya in Barcelona. Although this map itself contains very little information and is limited to the drawing of the oriental coast of the Red Sea, where Badia sailed and carried out his measurements, it makes an interesting contribution. It is dated 24th May 1807 and signed with his pseudonym Hach Ali Bey ibn Othoman Bey el Abbassi. It also makes note of the latitudes and longitudes of 21 points, which he calculated, including those of Mecca and Medina.

Apart from these maps, Ali Bey drew a lot of small maps of particular places as well as architectural plans of some monuments.

fig. 6: Detail of Ali-Bey's signature of manuscript map of Red Sea drawn by Ali-Bey in 1807, custodied in the Cartoteca de Catalunya (RESM-B-1-4).



A small map and an architectural plan of La Mecca was made by Ali Bey, who entered into the sacred building wearing Arabic costume and it seems to be one of the first descriptions and surveys of La Mecca made by a western people more than forty years before the English traveller Richard Burton.

Comparing the manuscript map of the Red Sea preserved at the Institut Cartogràfic de Catalunya, and the printed ones, practically the same information is given and only the parameters of reference change, due to the fact that Badia drew up the map, while working for the Spanish government, but finally published it in France. So, the language of the map changes from Spanish to French and the meridian changes from Greenwich to Paris. The atlas maps printed by Badia use the Paris meridian, but by analysing the original manuscript it shows that Badia originally worked using the Greenwich meridian. It is not known, which zero meridian was employed in the originals of the Moroccan map, but the Spanish Armada map uses Cadiz and Chénier uses Paris. According to this manuscript map the editing is very faithful to the original, and so it looks as if the contribution of the cabinet draftsman, often fundamental, was minimal.

FINAL REMARKS

The Ali Bey or Badia maps opened up the new modern era of Spanish cartography of the North Africa, which would be continued by other travellers up to the geodesic campaigns carried out by the Spanish army until the first third of the 20th century.

What was the result of this neo-colonial cartography? Is Ali Bey unique in the way he accomplishes a little of everything? His map of Morocco was conceived as both a scientific and political document, although the circumstances of publication reduced it to the mere scientific. The other Ali Bey maps and plans completely fulfil the concept of travel in the 19th century and are at the same time scientific, revealing a source of prestige for his author, too.

In fact, Ali Bey lived between two periods. He was the last Enlightenment traveller of the 18th century and a precursor of romanticism and one of the first colonial agents to live through the changes of location of Spanish colonial interests from the American framework to the North Africa. The success of these beginnings was very feeble, but Ali Bey acquired, if nothing else, a considerable advertising success.

Curiously enough, the Ali Bey map of Morocco is not usually quoted in historical studies of cartography (for instance, Norwich's Maps of Africa) or Moroccan bibliography. In Catalonia and Spain, Badia has periodically been a motive for diverse studies, but we do not know of any reference to his work on cartography. This paper intends to be a contribution to his knowledge.

M. Carme Montaner
Anna Maria Casassas
Institut Cartogràfic de Catalunya

APPENDIX

ALI BEY, *Voyages d'Ali Bey el Abbassi, en Afrique et en Asie, pendant les années 1803, 1804, 1805, 1806 et 1807*, [éd. par Baptiste de Roquefort], 2 vols and 1 atlas (Paris: P. Didot, 1814).

Editions until 1944:

Paris: P. Didot, 1814

London: Longman (A. Strahan), 1816

Milano: Tipographia Sonzogno e Comp., 1816-7

Weimar: Verlage des Gr. h. S. pr. Landes-Industrie-Comptoirs, 1816

València: Librería de Mallén y Sobrinos, Imprenta José Ferrer de Orga, 1836

Puerto Rico: Imprenta de José Solves, 1860

Barcelona: Imprenta La Renaixensa, 1888-89

Barcelona: L'Avenç, 1892

Barcelona: Tipografia Catalana, 1907

Barcelona: Barcino, 1926-1934

Barcelona: Olimpo, 1943

Barcelona: Hesperia, 1944

General maps enclosed in the Atlas:

1. Carte des routes d'Ali Bey el Abbassi, dans l'île de Chypre d'après ses propres observations astronomiques et ses recherches. Dessinée par Ali Bey; gravée par Adam. [1:1 800 000 approx.]. 13 x 16 cm. Longitude Est de Paris.

2. Carte du royaume de Maroc, construite par Ali Bey el Abbassi d'après ses propres observations et ses recherches. Gravée par Adam Ainé; écrite par G.T. Adam. [1:1 950 000 approx.]. 49 x 69 cm. Longitude Est de Paris.

3. Carte de l'Afrique septentrionale dressée par le Major Rennell, en 1798, et corrigée en 1802, augmentée de la mer intérieure nommée el Bahhar Soudan d'après la théorie d'Ali Bey, confirmée par les renseignements qu'il a obtenus sur l'existence de cette mer en 1805. Gravée par Adam Ainé; écrite par G.T. Adam. [1:11 500 000 approx.]. 39 x 69 cm. Meridien de Greenwich.

4. Carte de la côte d'Arabie sur la mer Rouge construite par Ali Bey el Abbassi d'après ses propres observations et ses recherches. [1:2 500 000 approx.]. 51 x 44 cm. Longitude Est de Paris.

5. Carte routière des voyages d'Ali Bey el Abbassi dans l'île de Chypre et du Caire à Constantinople construite par lui-même d'après ses propres observations astronomiques, ses estimations des routes et ses recherches. [1: 2 500 000 approx.]. 55 x 44 cm. Longitude E. du Méridien de l'observatoire de Paris.

Plans enclosed in the Atlas:

- V-A- Cadran grossier dont on se sert pour observer l'heure du soleil. Gravé par Adam 13x17 cm.
- IX- Plan de la ville de Maroc. Adam sculp. 19x24 cm
- XVIII- Plan du Cythère en Chypre. Dessiné par Ali Bey; gravé par Adam. 17x13 cm
- XXI- Plan des ruines du Palais de la Reine. Dessiné par Ali Bey; gravé par Adam. 25x20 cm
- XXIV- Plan du Yéroschivos Aphrodytis ou Jardin Sacré de Vénus près de Paphos. Dessiné par Ali Bey; gravé par Adam 13x17 cm
- XXX- Côte de Paphos. Dessiné par Ali Bey; gravé par Adam. 17x13 cm
- XXXIX- Plan d'Alexandrie en Égypte: Ce plan d'Alexandrie est celui de Pockoke, rectifié. Dessiné par Ali Bey; gravé par Adam 13x17 cm
- XLIX- Plan du village de Mina, dans le désert d'Aarafat. Dessiné par Ali Bey; gravé par Adam. 2 maps 6x17 cm

BIBLIOGRAPHY

ALBERT I MAS, and ABEL Y LLUÍS RIUDOR, "Evolución de la cartografía española de Marruecos: entre el documento territorial y la representación simbólica del poder," in *España en Marruecos (1912-1956): discursos geográficos e intervención territorial*, ed. by Joan Nogué & José Luis Villanova (Lleida: Milenio, 1999), 279-302.

Alí Bei, un pelegrí català per terres de l'Islam [catàleg de l'exposició del Museu Etnològic de Barcelona], [exposició, compilació i coordinació dels articles, ALBERTO LÓPEZ], (Barcelona: Proa, 1996).

BADIA LEBLICH, DOMINGO, *Plan de viaje al Africa con objetos políticos y científicos acompañado de un memorial con Carta Geográfica*, [presentado a Godoy el 8 de abril de 1801]. Manuscript document. Arxiu Municipal d'Història de Barcelona.

BARBERÁ FRAGUAS, SALVADOR, "Prólogo [y edición]," in *Alí Bey, Viajes por Marruecos*, Biblioteca Grandes Viajeros (Barcelona: Ed. B, 1997), 9-127.

BARCELÓ, JUAN, "Apunts sobre la vida de Domènec Badia i Lebllich," in *Alí Bei, un pelegrí català en terres de l'Islam* (Barcelona: Proa, 1996), 41-60.

HADJIPASCHALIS, ANDREAS, and MARIA IACOVOU, *Maps and Atlases*, (Nicosia: The Bank of Cyprus, 1989).

INIESTA, FERRAN (revisión técnica, prólogo y notas), *Park, Mungo. Viajes a las regiones interiores de Africa (1795-1805)*, Colección Avatares. (Barcelona: El Serbal, 1991).

LÓPEZ PIÑERO, JOSÉ M., et al, *Diccionario histórico de la ciencia moderna en España*, 2 vols (Barcelona: Península, 1983).

Norwich's maps of Africa, revised and edited by Geoffrey C. Stone (Vermont: Terra Nova Press, 1997).