PIRI REIS

His uniqueness among cartographers and hydrographers of the Renaissance

by Svat Soucek 393 Walnut Lane Princeton New Jersey 08540-3466, USA svat.soucek@gmail.com

Piri Reis (ca 1480-1553) was an Ottoman-Turkish corsair, admiral in the imperial navy, and, most importantly, author of portolan charts and sailing directions as well as of two world maps. His early life as a gazi-corsair', approximately from 1490 to 1510, was spent by the side of his uncle Kemal Reis, a renowned corsair with whom he criss-crossed the Mediterranean, gaining unparalleled knowledge of this sea. After the death of Kemal Reis in 1510, Piri Reis spent more time at the naval base of Gallipoli where he engaged in cartographic and hydrographic activities. He drew two world maps, the first in 1513 and the second in 1528. Neither exists in its complete state: that of 1513 was torn longitudinally in such a way that only its western third, showing the Atlantic fringe of Europe and Africa, the ocean, and the eastern fringe of the New World has survived, while the map's eastern two thirds are lost; that of 1528 shows only about one sixth of what a complete world map would be, but its state of preservation indicates that unlike its predecessor, it had not been mutilated but was left unfinished. Piri Reis also compiled the Kitabi Bahriye, a volume of portolan texts and charts for the Mediterranean (a preliminary, shorter version in 1520, and a definitive, longer one in 1526). The mariner slipped into obscurity after 1528, to reemerge in 1547 as commander of the Ottoman Suez fleet. In 1549 he recovered Aden, won in 1538 but lost again, for the empire. Three years later, however, he failed to conquer Portugueseheld Hormuz, and withdrew to Basra where he left the greater part of his squadron and returned with two galleys to Suez. Accusations surrounding the failure at Hormuz led to a death sentence by Suleyman the Magnificent, which was carried out at Cairo in 1553. Piri Reis's importance is anchored in several aspects that make his work and person unique. One is the intensely personal and specific nature of the manner in which he presents his work: he explains how, where, and why he drew the charts and wrote the texts. Another is the uniqueness of the works themselves. In order to produce the 1513 map, he used both Western (mainly Portuguese) and Oriental (presumably mainly Arab) sources. The Kitabı Bahriye has no equal as a comprehensive and detailed volume of portolan charts and texts covering the entire Mediterranean. Finally the personal lot of Piri Reis makes him unique when compared with his peers among Western cartographers and cosmographers. While most of them were employed by monarchs and companies eager to use their expertise, in this capacity he was ignored, before being executed by the monarch to whom he had dedicated the Kitabı Bahriye 2.

Piri Reis (ca 1480-1553) fut un corsaire turco-ottoman, amiral de la marine impériale, et surtout l'auteur de cartes marines, d'instructions nautiques ainsi que de deux cartes du monde. Il passa la première partie de sa vie comme gazi-corsaire³, de 1490 à 1510 environ, au côté de son oncle Kemal Reis, un corsaire célèbre avec lequel il sillonna la Méditerranée, acquérant une connaissance inégalée de cette mer. Après la mort de Kemal Reis en 1510, Piri Reis passa la plus grande partie de son temps à la base navale de Gallipoli où il se consacra à des activités cartographiques et hydrographiques. Il dessina deux cartes du monde, la première en 1513 et la seconde en 1528. Aucune n'est conservée dans un état complet : celle de 1513 a été déchirée longitudinalement de telle manière que seule sa partie occidentale - montrant la bordure atlantique de l'Europe et de l'Afrique, l'océan et la bordure orientale du Nouveau Monde - a été préservée, alors que les deux tiers

¹ Gazi, a Turkish loanword from Arabic, means [Islamic] holy warrior, and gaza means [Islamic] holy war. Ottoman Turkish preferred these terms to their Arabic near-synonyms mujahid and jihad.

² Literature on Piri Reis and his work began to appear after the 1929 discovery of his 1513 world map, and is likely to proliferate during 2013 in the framework of commemorations celebrating the map's half-millennial anniversary. Bostan, 2007, Soucek, 1992, Soucek, 1995, and Soucek, 1996, may serve as the basic introduction.

³ Gazi, un terme turc d'origine arabe, signifie "combattant de l'islam], and gaza guerre sainte [pour l'islam]. Le turc ottoman préférait ces termes à ceux, presque synonymes, de l'arabe mujahid and jihad.

orientaux de la carte sont perdus : celle de 1528 montre seulement environ un sixième de ce qui devait être une carte complète, mais son état de conservation indique que contrairement à la précédente, elle n'a pas été mutilée, mais est restée inachevée. Piri Reis a aussi compilé le Kitabı Bahriye, un recueil de portulans (au sens d'instructions nautiques) et de cartes marines de la Méditerranée (une version préliminaire, plus courte en 1520, et une définitive, plus longue, en 1526). Le marin disparaît des sources après 1528, pour réapparaître en 1547 comme commandant de la flotte ottomane à Suez. En 1549 il reprend Aden pour l'empire ottoman, laquelle avait été conquise en 1538 mais reperdue ensuite. Trois ans plus tard, cependant, il échoue à conquérir Ormuz tenu par les Portugais, abandonne Basra où il laisse la plus grande partie de son escadre et retourne avec deux galères à Suez. Les accusations portées contre lui suite à l'échec d'Ormuz conduisirent Soliman le Magnifique à le condamner à mort et à le faire exécuter au Caire en 1553. L'importance de Piri Reis tient à différentes caractéristiques qui rendent son travail et sa personne uniques. L'une est la manière très personnelle et singulière avec laquelle il présente son travail : il explique comment, où et pourquoi il a dessiné les cartes et rédigé les textes. L'autre est le caractère exceptionnel de ses travaux eux-mêmes. Pour dresser la carte de 1513, il utilisa à la fois des sources occidentales (principalement portugaises) et des sources orientales (vraisemblablement arabes pour l'essentiel). Le Kitabı Bahriye n'a pas d'équivalent en tant que recueil complet et détaillé réunissant des cartes portulans et des textes couvrant la Méditerranée dans sa totalité. Enfin son destin en fait un personnage unique parmi ses pairs les cartographes et cosmographes occidentaux. Alors que la plupart d'entre eux furent employés par des monarques et des compagnies de commerce avides d'utiliser leurs compétences, lui-même ne fut pas reconnu pour son talent et finit par être exécuté par le monarque à qui il avait dédié le Kitabı Bahriye4.

1 Piri Reis was unique in several respects

He both drew portolan charts and wrote portolan texts. Combining the two related genres, he produced the *Kitabı Bahriye* ("Book on Maritime Matters"), a volume which with its structure and comprehensive coverage of the Mediterranean has no equal.

The world map he drew in 1513 was, in its original state, based on both European/Christian (mainly Portuguese) sources, and Oriental/Muslim (in all likelihood mainly Arab) sources. Again, no counterpart is known to have ever existed, with the possible exception of another world map which he drew in 1528 but whose extant portion is too small to allow us to affirm this with certainty.

His early incarnation as a Turkish *gazi*-corsair also sets him apart from Christian chartmakers, whose formation was usually grounded in commercial sailing, voyages of exploration or theoretical training on land.

He revealed the circumstances under which he produced his work, and his reasons for doing so, in an exceptionally detailed and personal manner, which likewise sets him apart from his peers and counterparts.

His personal trajectory is symptomatic of certain fundamental differences between the Ottoman Muslim Fast and the Christian West.

Let me now discuss Piri Reis and his work in greater detail.

2 The Kitabı Bahriye (Book of Maritime Matters)

In chronological terms, Piri Reis's 1513 world map is his earliest known work, so its discussion ought to come first. The intensely personal and informative tone of the introductory and concluding segments of the book, however, should facilitate the presentation of the subject in the proper perspective.

Piri Reis produced two versions of the book, a shorter and a longer one. The former dates from 926/1520, and consists of a preface and 132 chapters with as many charts; the latter dates from 932/1526, and consists of a preface, a long versified introduction, 210 chapters accompanied by charts, and a versified epilogue.

The preface to the shorter version starts with the standard form of Islamic literature: praise of God and the Prophet, followed by the reasons for writing the

⁴ La littérature scientifique sur Piri Reis et son travail débute en 1929 avec la découverte de sa carte du monde de 1513 et il est probable qu'elle sera abondante en 2013 dans le cadre des commémorations célébrant le demi-millénaire de sa carte. Bostan, 2007, Soucek, 1992, Soucek, 1995, and Soucek, 1996, peuvent servir d'introduction.

book. The last-named aspect has a personal touch that alerts the reader to the special circumstances surrounding Piri Reis and his work: he wrote the book on the occasion of the enthronement of Sultan Suleyman (1520-1566; eventually surnamed Kanuni - the Lawgiver - in the Ottoman Empire, Magnificent in Christian Europe). Many people rendered homage to the new sovereign by offering him the best examples of their crafts, and Piri Reis did so with this book. Just as the others expected to receive recognition and recompense for their efforts, he too had the same hope. Having stated this personal wish, the author spells out an additional one: to provide his Turkish fellow-seamen with a manual that will help them in their difficult and dangerous trade – navigation in the Mediterranean.

The preface to the longer version starts with similar conventional elements, but does so in a much more complex, detailed and informative manner both on the personal and professional levels. His own words will best convey the psychological and factual content of this passage:

The reason for compiling this book is that a number of master craftsmen have now brought forward offerings from their various trades to the auspicious threshold and felicitous gate of His Majesty the World-protecting Emperor, so as to gain high status in society and attain name and renown through the matchless favor of that well-favored sovereign. Harboring the same hope, I, this weakest of insignificant slaves, paternal nephew of the late Captain Gazi Kemal, the lowly Piri Reis, son of Hacı Mehmed, have also compiled within the limits of my abilities - a memorable book on the science of navigation and the profession of the mariner, so as to present it to the auspicious abode of the Emperor. Until now, nobody has produced a useful manual of this type dealing with the above-mentioned science.

It happened in the following manner. I acquired knowledge of the shores and islands, inhabited and desert, and of the ports, fresh water sources and submerged rocks and shoals of the Mediterranean through study and eye-witness experience while in the company of Kemal Reis and other gazis. I have explained them in full, for it is neither possible nor feasible to record these features on a chart – the latter is much too concise.

I wrote down all this information in Gallipoli and had completed my work by the year 932

[= 1526] since the Migration of the Prophet – peace be upon Him! I collected the illustrations together with the texts, and this book is the result. I have organized it in such a manner that the point of departure is the fortresses known as Sultaniye and Kilidülbahir near Gallipoli; proceeding place by place and spot by spot, I describe the entire sea, and after this grand tour I again end up at the two fortresses. This [consistent route has been followed] in order to avoid hesitation and facilitate finding the necessary passage in times of emergency⁵.

In the final segment of this preface, Piri Reis makes an allusion to the portolan's first version, explaining why he had failed to produce a finished copy, and tells the reader what helped him succeed five years later:

However, because I despaired of being able to present the book [i.e., the first version] to the World-protecting Emperor's threshold of felicity and nest of happiness, I felt too exhausted to produce a finished copy. Now, words that command respect have been directed at this insignificant slave and contemptible person, with the order that I convert the draft into a finished copy. Conforming thus to the order obeyed by the world and to the command that requires compliance, issued by the occupant of the mansion of the vizierate and the incumbent of the office of grand vizier, that sun of felicity and moon of happiness, His Excellency Ibrahim Pasha – may God facilitate what he desires! – I set to work and, as far as my abilities allowed me and my powers sufficed, and with the help of God, I fully converted this draft into a finished copy. It is hoped from God - may He be glorified and exalted! - that it will be graciously accepted by His Majesty the Sultan6.

It is thus clear that Piri Reis had failed to receive the encouragement he had hoped for when he tried to attract the attention of the sultan – or of other members of the governing elite – and possible reward when he had written the first version, although, as he mentions only inferentially, the book may already have begun to serve its basic purpose, that of a navigational tool. It was the fortunate accident of his appointment as pilot of the ship taking grand vizier Ibrahim Pasha to Egypt that led to the compilation of the second version. He writes about it in the rhymed verse of the epilogue:

In the year 939 since the Migration [of the Prophet, divine] wisdom ordained [the course of events] in the following manner: the sultan of

⁵ Soucek, 1996, p. 86. References to the Turkish text can be found on the margins of the translations in this book.

⁶ Soucek, 1996, p. 87.

the sultans of the time, Suleyman, the sole ruler of the world, said: 'I command that my justice favor Egypt by extending all the way thither.' And he proceeded to dictate an order to the effect that Ibrahim Pasha was to go to Egypt... The high Pasha, hearing these words, held the imperial order to be of greater importance than his own life. He saw to it that two well-equipped ships were readied, [determined as he was] to set out forthwith. At this point his advisers said: 'We also need a navigator!' When a search was made, they were told, 'There is an expert one, well-versed in his art, hair-splittingly meticulous: the sea captain Piri bin Mehmed, articulate and of good character.' As a result of this recommendation, I was taken [aboard] as navigator, in order to help the ship find the way to Egypt...

But listen to [the gist of the story]. Whenever I fell into distress at sea, I always consulted a book. The [sailing] directions that I had written down in [this] book of mine amply demonstrated the excellence of my expertise. His excellency the great Pasha saw how my book was being put to use all the time. He understood that there was something valuable there, and he [expressed] a wish to examine it. When it was brought to him he looked at its every detail and [realized] how I was plotting the course with it. He thus grasped its gist...; he knew that there was accuracy, mastery in the art of navigation [contained in my book]... [and] he showed esteem for this slave of his as a result. ... He said, 'You are a very able man, and there is much excellence in your character. The entire configuration of the sea has become known [to you]: none of its spots are hidden from you. I wish that you make all of it manifest, and that you be remembered by it until doomsday. You should polish up this book well, all of it, so that it may be much used... Moreover, this book is very appealing, fit for being preserved in libraries. Polish it up and bring it without fail, so that we may present it to the sovereign of the world.' When I thus received [this] order, I accepted it with [all my heart]...I at once set to work with great zeal and produced a finished book. Praise be to God, I have reached my goal.

But I have a wish in this context: let me say it [both] confidentially and openly, so that you may know all these secrets. While working on the book, I have suffered [for quite a few] years. Since every slave [of God's] attaches himself to a cause with which to gain recognition, I too hope that, having written this book, I shall obtain my reward. Let those who read it and act [according to its directions], who [thus] reach perfection in sea lore, say, 'May God have

mercy upon him! May He accept him in His sublime abode! May He forgive him and pardon Him! May He not leave this slave deprived!'

There is yet another request I have, namely that this book of mine be constantly improved. If those who consult it notice errors and are able to correct [them], may God reward such masters who have perceived my shortcomings! But for one error they find and remove, they will find a thousand correct pieces of information... Since I have written [my book] with both of the above elements, hear now the conclusion of all this: day and night, within the limits of my stamina, overcoming worries, I compiled this book, section by section, and [now] I have written this [final] chapter, so that those who navigate find [the desired passage] from the opening chapter [on]⁷.

Piri Reis's personality thus comes through forcefully to a degree no other author of portolan charts and texts known to me has equaled. The two central themes, desire to provide a manual for his fellow-seamen, and hope for recognition and reward in this world and the next, dominate these opening and closing passages of the introduction and epilogue. Also remarkable are three other themes: discussion of the technical aspects of the subject and reasons for combining charts and texts through a mutually efficient structure; admission that the book is not free from error; and exhortation to his fellow-seamen and their successors who may notice these imperfections to correct them. These remarks show Piri Reis as a man possessed of an admirably modern and lucid mind.

Moreover, the 1526 version of the Kitabı Bahriye is not only what in modern parlance would be called a revised and expanded edition of the 1520 version as a book of sailing directions and nautical charts. The portolan proper is preceded by a long versified introduction, which can be divided into three sections. In the first section, after stating 'We roamed the coasts of the Mediterranean, the lands of the Arabs, Franks, Ottomans, North Africans, [and] I recorded every one of them', the author insists on the demanding nature of the mariner's profession and praises the mastery of his uncle Kemal: 'For although there were many sailors in his time, it was he to whom God gave success.' It is also here that the first specific date is mentioned: 900 of the Islamic calendar (900 began on 2 October 1494 and ended on 20 September 1495) as the year in which Sultan Bayezid II (1480-1512) summoned Kemal Reis into his service. In the third section, which consists of two interwoven parts, Piri Reis's

somewhat zigzag discussion covers cosmography – principally from a maritime perspective – and the voyages of great discoveries. While in 1526 most of the places under discussion were remote both geographically and politically from the Ottoman Empire, the Persian Gulf ("the Sea of Pars") was at its periphery, and the Red Sea had already entered its orbit. Piri Reis treats each in a special way. Hormuz, an international port city at the entrance to the Persian Gulf whose commercial and strategic role was famous, was seized by the Portuguese in 1515, and he relates the consequences:

Now that you have heard about the situation of Bahrayn, come and listen to what it is like at Hormuz. Know that it is an island. Many merchants visit it... But now, O friend, the Portuguese have come there and built a stronghold on its cape. They control the place and collect the customs — you see into what condition that province has sunk! The Portuguese have prevailed over the natives, and their own merchants crowd the warehouses there. Whatever the season, trading cannot now happen without the Portuguese.

The third section ends with the great story of the discovery of America.

The introduction ends as it began, in prose, and with a remark that answers those who might ask why the Mediterranean has been left out of the story. The author's answer is simple: the main body of the book is devoted to it. Piri Reis may be implying here that, whereas what has so far been told is only amusing or theoretical discussion, the bulk of the text contains solid practical information needed by Turkish seamen. This is indeed the principal significance of the Kitabi Bahriye, its function as a detailed and comprehensive book of portolan charts and texts describing the entire Mediterranean, and it distinguishes it from any other contemporary nautical manual. Furthermore, the difference is not only one of degree but also of kind, form, and purpose. It partly stems from the fact that Piri Reis was a *gazi*-corsair, and expected many of those who would use the manual to be in the same trade. Their needs up to a point differed from those of Christian Europe's captains, which consisted of data about the shortest commercial routes to the desired ports, needs that were reflected in the type of charts and manuals the Europeans used. To be sure, there was also Turkish seaborne trade and passenger traffic, but it remained confined to the eastern third of the Mediterranean. By contrast, Kemal Reis, Hayreddin Barbarossa and other Turkish mariners of their ilk

could be expected to operate in any part of this sea, and deal with emergency situations in which Piri Reis's legacy proved invaluable.

This difference in emphasis on maritime gaza on the Turkish side and seaborne trade on the Christian side is thus reflected in the type of charts and texts produced and used by the Turks and Christians: the Kitabı Bahriye with large-scale charts and detailed texts displayed a sharp contrast to atlases with smallscale charts and streamlined texts on the Christian side. The latter type was not altogether absent in the Ottoman Empire, but quantitatively it is dwarfed when compared with the number of such atlases made in Christian Europe – despite the fact that during the two centuries when their production reached its peak, the 16th and 17th, the Ottoman Empire controlled a good two thirds of this sea's waterfront and the totality of the Black Sea. We know of three atlases and two charts made by Turks, in contrast to several hundred such specimens made by Christians, among whom Italians and Catalans had the lion's share.

3 The Map of 1513

The author's identity and the place and time of the map's creation are recorded in a colophon located at the map's western edge in a location roughly identifiable with Central America. Unlike the rest of the inscriptions, which are in Turkish, the colophon is written in Arabic, and the hand is different (this does not necessarily mean that it was not Piri Reis who wrote it; the change of style may reflect the colophon's language and special function):

The person who drew it is poor Piri Reis son of Haci Mehmed and paternal nephew of Kemal Reis – may God pardon them both! – in the city of Gallipoli, in the month Muharrem the sacred of the year 919 (9 March – 7 April 1513)⁸.

Piri Reis also mentions the map in the introduction to both versions (of 1520 and 1526) of the *Kitabi Bahriye:*

I had previously made a map (hartı) that shows several times more than the standard (charts) do. [I did so] on the basis of maps hitherto unknown in Rum that have lately been arriving from the seas of India and China. I incorporated them [in my map, which was then] presented to the late Sultan Selim Khan — May he rest in peace! — at Cairo, and it was accepted.

The presentation was made in 1517, while the Ottoman sovereign was spending the summer at Cairo after the conquest of Egypt.

⁸ Soucek, 1996, p. 49.

⁹ Soucek, 1996, p. 50.

If we step back and examine the map from a broader perspective, we see that the original sheet was torn longitudinally: the area covered, the shape of the extant portion and the disposal of its windroses all suggest that in its original state the map had been three times its present size. On the eastern (right-hand) side only the western half of the Iberian peninsula and the westernmost portions of Africa are shown. The bulk of the extant portion covers the Atlantic Ocean, islands of the Caribbean, parts of Central America, and the eastern bulge of South America.

The map is drawn, like most portolan charts, on parchment, and the size of the extant part is 65 x 90 cm. Its portolan character is apparent from the five concentric focal points of rhumb lines (two in the form of full-fledged windroses), the mesh of rhumb lines themselves, and two scale-bar ribbons — as well as from the characteristic absence of projection of latitude and longitude grading. Place names along the coasts are disposed, as always in portolan charts, on the landward side perpendicular to the coast. That the map was intended for presentation is evident from the eye-catching depiction of ships, inland cities, monarchs and curious creatures, from natives to animals and birds, and the legends accompanying these features.

The map thus should be ranged among portolan charts of the age of discoveries, a genre that is broader in scope, both geographically and historically, than the relatively static, conservative Mediterranean portolan charts. Just as the *Kitabi Bahriye* stands out among its Mediterranean peers, however, the 1513 world map too stands out among its oceanic peers. One aspect of its uniqueness is obvious: it was made by a Muslim Turk. The other aspect was explained by Piri Reis himself in a paragraph placed near the south-western corner of the map:

This is a unique map such as no one has ever produced, and I am its author. I have used twenty maps and mappaemundi (yapamondolar). The latter derive from a prototype that goes back to the time of Alexander the Great (Iskender-i Zülkarneyn) and covers the entire inhabited world – the Arabs call such maps cağferiye – I have used eight such cağferiyes. Then I have used one of the Arab maps of India, four maps made by the Portuguese who applied mathematical methods to represent the Orient (lit. Sin, Hind, and Çin), and finally, I have also used a map drawn by Columbus (Kolonbo) in the western part [of the world]. I have brought all these sources to one scale, and this map is

the result. In other words, just as the sailors of the Mediterranean have reliable and well-tested charts at their disposal, on this map too [the depiction of] the Seven Seas is reliable and worthy of recognition¹⁰.

This statement is tantalizingly informative but also frustratingly enigmatic. We can trust that Piri Reis is telling the truth when he tells us about the numerous sources he has used. Beyond that, however, there is little hard data that would help us identify these sources more precisely. "Yirmi miktar hartı ve yapamondolar" = Twenty maps and mappaemundi: the number twenty appears to indicate the whole group (although the exact count of the specified items amounts only to 14), while the conjunction "and" must mean that among these twenty maps, some were of the mappamundi type, but then Piri Reis puzzles us with the remark that Arabs called them cağferiye – a term otherwise unknown. He may have "turkicized" and mangled here the Arabic word for geography, jughrafiya, on the basis of Arab maps of the classical tradition which occasionally applied this loanword from Greek to maps representing the inhabited world. His use of the word yapamondolar, mappaemundi, as its equivalent, however, creates a new quandary: does he really mean Arab maps, or was it genuine specimens of Western mappaemundi that had fallen into his hands and become part of the sources for his map? Their relatively large number – eight – does not make the problem any easier. Another puzzle is the map referred to as 'One of the Arab maps of India'. The four Portuguese maps of 'Sind, Hind and Cin', the Muslim term for 'the Orient', may have been full or partial copies of the padrão real, charts produced at the Casa da India, the government agency supervising overseas navigation and trade in Lisbon; the Cantino planisphere, made in or shortly before 1502, is their representative example. As for the 'map made by Columbus', Piri Reis's own map shows that he must also have used other sources depicting South America (specifically, the eastern bulge of the continent, thus Brazil), which Columbus could not have known at the early stage when he made the map mentioned by Piri Reis; these sources may have been the above-mentioned four Portuguese maps. Yet paradoxically but understandably, it is the fleeting mention of an early but then lost map made by Columbus as one of its sources that has made Piri Reis's map and its author famous - although only posthumously after a delay of over four centuries.

The map had been presented to Sultan Selim I in Cairo after the conquest of Egypt, but then it fell into oblivion until two scholars, a Turk and a German,

while examining the manuscript collection of the Topkapı Sarayı, came across it in 1929. They showed it to the Orientalist Paul Kahle who happened to be present, and the identification of its true nature created an international sensation. The map and its author became a point of pride for the Turks, who viewed it as proof that since the time of the Renaissance and Great Discoveries, they too have participated in the rise of the modern world. The participatory aspect was further enhanced by the fact that Piri Reis may also have used for the map's construction an early but subsequently lost map made by Columbus. The president of the Turkish Republic, Kemal Atatürk, instructed the Turkish Historical Society to produce a reproduction of the map¹¹, with the result that a beautiful facsimile was published in 1933. Moreover, the process also led to a surge of interest in Piri Reis's other great work, the Kitabi Bahriye. In 1935 the same institution published a facsimile edition of one of its best manuscripts, with excellent ancillary materials prepared by two scholars of Turkish naval history, Fevzi Kurtoğlu and Haydar Alpagut¹².

4 The Map of 1528

Some time in 935 (15 September 1528 - 4 September 1529) Piri Reis drew another chart that was – or had been meant to become – a world map. Only a fragment, possibly one-sixth, has survived, but once again luck has softened the misfortune, for the extant part bears the author's signature, written in the same kind of Ottomanized Arabic as the signature on the map of 1513: "Drawn by the lowly Piri Reis, son of el-Haci Mehmed, known as the paternal nephew of the late Reis Gazi Kemal, from the city of Gallipoli, in the year of 935". The extant part measures 69x70 cm and consists of the upper left corner the north-western portion – of the presumed world map, approximately from 10 degrees north to 65 degrees north and from 20 degrees west to 90 degrees west, in other words, the north-west Atlantic and the adjacent coasts and islands. The map's style is again that of a portolan chart: windroses, rhumb lines, scale-bars in the form of ribbons place it in that category. Its unfinished state suggests that Piri Reis,

seeing no reward or encouragement forthcoming, finally gave up on this line of career.

5 Piri Reis's uniqueness in the Ottoman Empire

A special and less fortunate aspect of Piri Reis's uniqueness is thus the absence of his integration as a cartographer, hydrographer and cosmographer into the structural system of the Ottoman Turkish polity, both on the official and private level. He undertook to create his work entirely on his own, and received no recognition or recompense for what he had accomplished, and no encouragement to produce more. The interest grand vizier Ibrahim Pasha took in him and his work was a promising start; however, his presumed attempt to attract the interest of Suleyman the Magnificent ran into a dead end. The sultan and the rest of the Ottoman governing elite failed to grasp the value of Piri Reis's work, and this neglect had adverse consequences not only for him: the opportunity to create an Ottoman-Turkish school of cartography and cosmography vanished with him. The sultan had Ibrahim Pasha executed in 1536; and although the Kitabı Bahriye continued to be copied for almost two centuries, it was a pursuit frozen in time. A number of the extant copies have marginal notes by seamen either to add information on the basis of their own experience or to mention events that occurred on the campaigns of the imperial fleet in a given area. Several copies of the first version have colophons made by the copyists, usually employees at the imperial arsenal, indicating their names as well as the date at which they finished their work. None of the copies of the second version has the copyist's colophon, and their larger size and lavish production suggests that they were copied as objects of esthetical enjoyment or amusing reading, probably at the imperial workshop producing manuscripts illustrated by miniature paintings. It is also revealing that this ultimately sterile type of attention bestowed upon Piri Reis's work remained limited to the Kitabi Bahriye, thus to the Mediterranean scene, whereas his two world maps, one mutilated and the other unfinished, were forgotten. Perhaps rightly so: they represented a world that

¹¹ The excellent reproduction (Piri Reis, 1933) is accompanied by a booklet containing a thorough analysis and description in Turkish, English, French, German and Italian by the noted historian Yusuf Akçura.

¹² Piri Reis, 1935. The same manuscript has been used for a large 4-volume edition published in 1988 by the Istanbul Research Foundation (Piri Reis, 1988). It has both advantages and drawbacks in comparison with the 1935 edition: the editors have included, on facing pages of the text and in separate columns, 1) a transliteration of the facsimile's Arabic script into yeni yazı, the Roman script used today; 2) a translation of the Ottoman text into modern Turkish; and 3) an English translation. Up to a point this is an advantage, but it matter, both in its modernized Turkish version and in the English translation; moreover, the long and thorough introduction to the 1935 edition is a model of first-rate scholarship absent from that to the 1988 edition.

lay beyond the horizon of the Porte's ambition or interest. It felt no need to establish an agency, sponsored by the government or by a company engaged in maritime activities, or to sponsor private groups doing so, as was done in Portugal, Spain, Holland, France, and England. The Ottoman governing elite from the sultan down to the rest of the ruling class had different sets of values, and there was no compensatory private group – intellectual or economic – to provide sufficient stimulus and demand.

Piri Reis was thus an exception, one of those Ottomans who lived on the margin of the mainstream establishment determined to preserve the existing order¹³. In this context, it may be useful to glance at Piri Reis's life and work from a *comparative* perspective, by juxtaposing his life and work with those of his counterparts in Christendom. In the first place, we see an enormous quantitative difference. Piri Reis was not only unique but also an isolated case in the Islamic East; in the Christian West, his counterparts were legion. One example must suffice. Diego Ribero (? -1533) started, like Piri Reis and possibly the majority of maritime cartographers, as a seaman. Born in Portugal, he sailed with the trailblazers of Portuguese overseas expansion Vasco da Gama, Lopo Soares, and Afonso de Albuquerque. By 1518 he had settled in Seville where, known henceforth by the Spanish form of his name, Ribero, he became an employee of the Casa de Contratación (Board of Trade). In 1523 he was named cosmógrafo real, or, using modern parlance, a state employee in the cosmography department of that office; one year later he joined the Spanish delegation at the Conference of Badajoz which was convened to determine the position of the Philippines, a matter of dispute between Spain and Portugal. Ribero eventually became Head Cosmographer, in which capacity he took charge of the padrón real, the constantly updated official Spanish map used as a template for the charts carried in Spanish ships. The world map created under his stewardship in 1529 shows for the first time the real extension of the Pacific; six other world maps are attributed, directly or indirectly, to Diego Ribero. He was thus a remarkable figure in the age of discoveries and overseas expansion undertaken by renaissance Europe, but far from being the only one, he represented a whole system on several

levels - political, economic, and cultural. Monarchs of the age vied for the services of men like him. And what do we see on the Ottoman side of the religious divide? One man, Piri Reis. His 1513 world map in its original state was an unparalleled masterpiece, but it was mutilated and forgotten; and a second map, however promising, was left unfinished. The Kitabi Bahriye too was a great and unique achievement, but it remained frozen in time, while in the West, nautical literature underwent a rapid evolution toward ever greater volume and accuracy. This is the extant sum total of Ottoman Turkish cartographers and of their charts from the age of discovery. The enormous difference means that beyond Piri Reis, his society, from the sultan down to the rest of the governing, intellectual and business elites, had no desire to grasp his message about the significance of what the Ottoman Empire's historic rival, the Christian West, had embarked on.

Diego Ribero died in 1533, after a life of achievement and service to his government and society. Piri Reis survived him by two decades, but we know little about his life between 1528 and 1547, when he emerged as commander of the Ottoman fleet at Suez. Since the death of Kemal Reis in 1510 he must have spent more time in Gallipoli occupied with his cartographic work. He did not fully abandon the life of a seaman, for we find him as one of the companions of the greatest of Ottoman gazi-corsairs and later commander-in-chief of the imperial navy, Hayreddin Barbarossa. In 1515 the latter, still engaged in independent gaza from his base at Algiers, placed him in charge of a squadron sent to Istanbul with gifts for Selim I14; in 1537 Piri Reis was one of the captains in the imperial fleet under the command of Hayreddin Barbarossa, engaged in the Ottoman siege of Corfu¹⁵. In 1547 Piri Reis was given the above-mentioned post of commander of the Indian Ocean fleet (Hint kaptanlığı) based at Suez. This was a conceivably flattering appointment, but one which confirmed the Porte's inability to appreciate the principal value of Piri Reis as a cartographer and cosmographer. Nevertheless, his final career started auspiciously when in 1549, with an armada of 60 ships, he carried out the re-conquest of Aden, won first in 1538 but then lost. Luck soon turned against him, however. In 1552 another, smaller armada of 30 ships under his command sailed from Suez with the purpose of seizing

¹³ The fate of the rasathane, the observatory founded at Tophane in the 1570's under the supervision of Taqi al-Din, an Arab muvakkit (time-keeper in a mosque) from Syria, is another illustration of this climate. In 1580 sultan Murat III ordered it demolished, on the advice of the şeyhülislam (chief jurisconsult) Ahmet Şemseddin Efendi who declared that the observatory's pursuits were contrary to the principles of Islam. This happened just as the King of Denmark Frederic II built an observatory for Tycho Brahe, whose accurate observations provided Kepler with data indispensable for his solution of planetary orbits, which in turn facilitated Newton's discovery of the laws of gravity and motion. See Soucek, 2008, p. 53-54.

¹⁴ Kâtip Çelebi, 1329/1911, p. 27.

¹⁵ Bostan, 2007, p. 84.

Hormuz from the Portuguese. The siege failed, and reports that a Portuguese relief fleet was approaching from Goa made Piri Reis withdraw to Basra where he left the greater part of his squadron and returned with two galleys to Egypt. Suleyman the Magnificent was at that point waging his third war against Safavid Iran, a far more important business, and may have viewed the case of the failed naval commander as a minor but irritating issue that should be quickly settled. Arrested by the Ottoman governor of Egypt, Piri Reis was executed in 1553 in compliance with an order issued from the imperial headquarters¹⁶. The sultan probably never recalled - if in fact he ever noticed it - that the aged mariner had at the time of his enthronement dedicated a book called Kitabi Bahriye to him, and that still earlier he had made a strange map whose mutilated remains lay forgotten in the library of Topkapı Palace.

Conclusion

Piri Reis and his work occupy a special place in the framework of the exhibition "L'Age d'or des cartes marines: Quand l'Europe découvrait le monde". They show that although the Ottoman Empire had the potential to participate in the discoveries, its ruling elite spurned the attempt to blaze a trail in this direction made by a representative of a marginal group whose other members too ran into dead ends. This fact alone made me hesitate – on the premise that some truths are better left unsaid – whether I should participate in a colloquium convened to celebrate one of the most exhilarating features of the Renaissance and rise of the modern world. Ottoman cartography and discovery literature, however, has lately featured prominently in an effort to construct a fictional reality, and the case of Piri Reis and his work has been used – and abused – for this purpose. During the 16th century, a gigantic contest between the Ottoman Empire and Portugal apparently took place in the Indian Ocean, and, according to an enthusiastic representative of this school, "it is no exaggeration to declare the Ottomans victors in the opening round of history's first truly global struggle for dominance"17. The fact that Piri Reis ran into a dead end as a cartographer and cosmographer, and

that after a lifetime of frustration he was killed by a callous and ignorant sovereign¹⁸, poses a problem, however, which is solved either by ignoring it or by resentencing the unfortunate man to death. The same historian who declares the Ottomans victors in the Indian Ocean also states that Piri Reis fully deserved the death sentence for "the treasonable offence of abandoning the Ottoman fleet to its fate in the [Ottoman] port of Basra instead of 'repatriating' it to Suez," and the author mentions with approval the execution of the sentence by the governor of Egypt (and later grand vizier) Semiz Ali Pasha, whom he praises for his "keen intellect, amiable disposition, and consistent openness to new ideas"19. In fact, the sultan and his viziers would have done well to seize the chance to expand the fleet in Basra, and use this base, far better suited than Suez, for penetration of the Indian Ocean – if that had indeed been their goal.

Piri Reis's fate thus represents a powerful argument against the image of the Ottoman Empire as fully engaged in the exploration and discovery of the world as its Western trailblazers were, and of a grandiose confrontation between the Ottoman Turks and the Portuguese on the Indian Ocean, a global struggle for dominance which the Turks won. If that had been the case, we would be speaking not of a Portuguese Estado da India but of an Ottoman seaborne empire embracing the Indian Ocean from Mombasa on the coast of east Africa to Melaka in Malaysia, a giant quadrangle whose other anchors would have been Hormuz and Aden. The spice trade crossing that maritime space and transiting the Middle East on its way to Istanbul and Venice would have become an Ottoman monopoly, for without any bases of their own, the Portuguese would hardly have been able to maintain their presence in this vast expanse so remote from their homeland. With its overwhelming advantages over Portugal: geo-strategic (compare the distance separating Basra - a port ideally situated for engaging the Indian Ocean - from Goa to that separating Lisbon from Goa), economic, politico-cultural (the coastal populations of the Indian Ocean basin, from Mombasa to Melaka, were by then mostly Sunni Muslims ready to welcome the Turks in

16 1554 has been more commonly mentioned as the year of Piri Reis's execution. Recent research carried out by Idris Bostan (Bostan 2007, p. 285) points to 16 December 1553 as the most likely date.
17 Casale, 2010, p. 12.

¹⁸ Modern historiography, in awe of Suleyman the Magnicent no less than his contemporaries – Muslim or Christian – were, hardly ever dares to question the 'justice' of his decrees or wisdom of his policies. The fate of Piri Reis evokes that of prince Mustafa, the sultan's oldest, ablest and most promising son, whose crime was being the son of an aging mother who could not compete with the charms of Hurrem Sultan, Roxolana of European lore. Determined to assure the succession of her own sons, Hurrem, together with grand vizier Rustem Pasha, engineered a plot whose outcome was the 'execution' of Mustafa, who came to pay homage to his father: while the sultan watched from behind a curtain, seven 'dilsizler', mutes (a method used to prevent any testimony on crimes that had to be covered up) pounced on the prince and strangled him. This happened in 1553, virtually coinciding with Piri Reis's execution.

their struggle against the infidels), and demographic, Ottoman victory should never have been in doubt. Far from seeing the Porte launching a vigorous campaign to found such an oceanic empire, however, we see that it did not even manage to bring the Persian Gulf under its control: the attempt by the small squadron under the command of Piri Reis to conquer Hormuz had been poorly planned and was too small for such an enterprise, besides being virtually sabotaged by the governor of Basra Kubad Pasha; more importantly, no other, better prepared campaign that should have been launched from Basra was ever undertaken. The great emporium, whose possession

by the infidels is so emphatically deplored by Piri Reis in the *Kitabı Bahriye*, thus continued to be a Portuguese possession instead of becoming a launch-pad for an Ottoman campaign to conquer the Indian Ocean. Even Bahrayn, a small but important counterpart to Hormuz near the Arabian coast of the Persian Gulf, repulsed an unofficial attempt made by the Turks to seize it, and remained under indirect Portuguese control. The Porte contented itself with the possession of Basra and recovery of Qatif, ultimately glad that the Portuguese were eager to trade with these revenue-bringing Ottoman sites on the periphery of its territorial, tax-gathering empire²⁰.

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²⁰ I discuss the basic aspects of this question, from the role of Piri Reis to the nature of Ottoman policy in the Persian Gulf and the Indian Ocean, in Soucek, 2008.