

Sites of Encounter in the Medieval World Lesson #5: Majorca

What were the effects of the exchanges at Majorca?

Major Topics:

- Competition over Mediterranean Trade
- Maps, Ships and Navigational Technology
- Exploring the Eastern Atlantic Ocean
- Growing Intolerance in Iberia



Caravel, Musée de la Marine,
Paris, photograph by Phgcom,
Wikipedia Commons,
http://en.wikipedia.org/wiki/Caravel#mediaviewer/File:PotugueseCaravel.jpg.

Majorca was ruled by the Muslim Almohads until its conquest by James I, King of the Crown of Aragon, in 1229. Its greatest importance was as a trading and shipping center for the western Mediterranean and the Maghribi ports, which controlled the gold trade from Mali and West Africa. Once the Majorcan base was established, Catalan merchants and shippers not only gained access to those markets, but also helped develop the maps, ships, and navigational technology which gave Mediterranean shippers access to the Atlantic Ocean. Using the combined technologies of Muslim, Jewish, and Latin Christian sailors, shippers, and mapmakers, Iberians began to explore the African coast, and the Canary and Azores Islands. However, the increasing intolerance of the Iberian Christian kingdoms ended that multicultural society by 1500.

Students will analyze primary maps, visuals and texts to investigate the technologies which made Atlantic exploration possible. After examining the multicultural population of Iberia before 1300, they will chart the progressive Christian intolerance in Aragon, Castile and Portugal, which led to the expulsions of Jews from Spain in 1492 and eventually Muslims as well.



Procedures

Step 1: Majorca as a Site of Encounter

Although Majorca is a small island, in the 13th century it was at the center of a profitable trade network of the Genoese, Catalan and Maghribi merchants and shippers. Distribute **SoE5.1 Majorca and Mediterranean**



Trade Routes Activity and project **SoE5.2 Iberian Peninsula, 1270-1492 Map** and the **Late Medieval Trade Routes** Map. Have students label and color their maps according to the directions and then divide them into groups or pairs, depending on the availability of computers, to do the **SoE5.3 Majorca and the Afroeurasian World** group activity. Because there are only four sets of questions for groups, several groups should complete each set. To

do this work, students need access to the *Sites of Encounter Interactive Map* on the Blueprint website. If there is no computer access, see the Modifications section for an alternative strategy.

When they are finished, ask students how Majorca's location made it a site of encounter. Remind them of Sicily in Lesson 1 and point out that this was 150 years after Roger's conquest of Sicily. Introduce the lesson focus question: What were the effects of the exchanges at Majorca? Tell students that maps, ships, and navigational technology will be the focus of their investigation in this lesson. The developments on this tiny island helped the Spanish to cross the Atlantic and the Portuguese to sail around Africa.

Step 2: Analyzing the Conquest of Majorca

Hand out the SoE5.4 Majorca and Iberia from 1227 to 1500 Background Reading and have students



complete the reading support activities and the **SoE5.5 Majorca and Iberia Timeline and the Change over Time Chart**. Explain to students that change over time is an important pattern for understanding history, and ask them to think about why Spanish and Portuguese Christians became less tolerant of Muslims and Jews while they go through the activities of this lesson. Tell them that their next reading is a primary source about James I of Aragon's conquest of

Majorca in 1229. Distribute **SoE5.6 King James I of Aragon's** *Autobiography* and guide them through the close reading activities. When they finish, discuss the reasons why James wanted to conquer the islands and the role of the Catalan merchants from Barcelona who encouraged him.

Step 3: Multicultural Creations in Majorca

On Majorca, Italy and Iberia, Latin Christian and Jewish map makers, navigators, ship captains, and sailors



absorbed the existing ship and sailing technology from Asia, the Muslim world and Christendom – such as the al-Idrisi's map in the Book of Roger (from Lesson 1), the compass and lateen sails – and experimented with ship design and navigation. By 1250, they began to



create new technologies and navigational techniques that made it possible to sail through the Strait of Gibraltar and further and further into the Atlantic Ocean. This step has students analyze the artifacts these practical sailors and mapmakers created in order to see how their work made later Atlantic voyages possible. First, students will closely examine features of the Catalan Atlas, created by Abraham Cresques in Majorca in the 1375. In **SoE5.7 Investigating the Catalan Atlas,** the teacher directions offer two options depending on the available classroom technology.

Next students will examine the mapmaking, navigational and ship technologies that enabled travel across



oceans in the 15th century. Post the visuals from **SoE5.8 Analyzing Naval Technologies** around the room for a gallery walk, or circulate them among seated student groups. Have student groups complete the analysis chart and discuss the questions. Make sure that they understand that the technologies built on the multicultural information base from Muslim, Jewish and Christian books and practical experience from sailors.

Step 4: The Effects of Improved Naval Technology in the Western Mediterranean

Motivated by the desire to increase their profits from trade, sailors from Majorca and the Western Mediterranean improved the design of ships so that they could sail into the Atlantic Ocean and further. **SoE5.9**Improving Ship Design has students analyze the development of ships from the 12th through the 15th



Citation: Mataro Model, from the Maritime Museum in Rotterdam, photograph by Joop Anker, 2009, Wikipedia Commons,

http://commons.wikimedia.org/wiki/File:Mataro Mode
L - Maritime Museum Rotterdam - WLANL.jpg

centuries. Distribute the handout to students and have them complete the activities individually.

Tell students now that they understand how the technology changed ships, they will look at the effects of those changes. In other words, what did Iberian people do with these powerful ships? Project the images from **SoE5.10 Effects of Improved Naval Technology** and have students list the effects in their notes. Point out to them that the last two visuals they analyzed represent ships from the voyages of Vasco da Gama and Christopher Columbus. These voyages mark the end of the medieval world and the beginning of the early modern period. They began a huge transformation in the world, by introducing Afroeurasia to the Americas and creating a new system of trade in the Indian Ocean. Tell students that they will study these voyages and their effects in a later unit.



Step 5: Investigative Reporting on Increasing Intolerance in Iberia

In this step, student groups will use primary sources as witnesses to incidents of tolerance or intolerance in Iberia. Distribute the first page and one of the primary sources (these are marked by Group 1, Group 2, etc.)



from **SoE5.11 Investigative Reports on Tolerance** to each group. The students should "interview" the sources following the directions on the first page, and prepare a report (as if they were TV reporters interviewing witnesses) either on videotape, as an I-report on a cell phone, or by a live skit. The sources give Christian, Jewish and Muslim perspectives on relations with other religious group from the 12th through the 15th century. While watching

the reports from other groups, students should fill out SoE5.12 Tolerance Reports chart.

Step 6: Effects of Exchanges at Majorca Conclusions

When the groups are finished reading the sources and filling out the Source Analysis Chart, lead them in a



discussion about the lesson focus question: What were the effects of the exchanges at Majorca and in Iberia? Using the teacher notes on **SoE5.13 Majorca and Iberia Change over Time Chart Key**, help students to discuss and chart the effects of exchanges at Majorca and how these effects relate to change over time. You may wish to discuss with them why Christian intolerance increased so dramatically in Iberia. This is a question much debated by historians,

but a partial answer is that spreading Christianity and defeating non-Christians became a central feature of Spanish identity over this period of time. Conclude by emphasizing the connection between the change in Iberia and the Spanish actions in the New World.

Modifications / Support for Student Literacy

On Step 1 map activities, if you do not have computer access for your students, use the group questions as a series of warm-up activities to begin each day's activities over the course of the lesson. Each day, project the appropriate map from the *Sites of Encounter in the Medieval World Interactive Map*, write the questions from one of groups (1 on the first day, 2 on the second day, etc.) on the board, have students answer those questions individually or in pairs. Briefly review their answers before going on to the lesson. In this way, you will cover the material in small chunks.



SoE5.1 Majorca and Mediterranean Trade Routes Activity

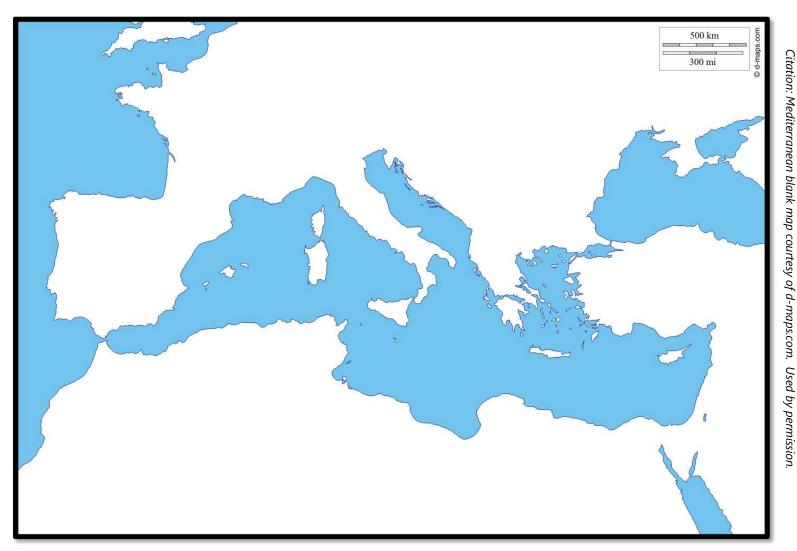
Instructions: Label these cities, states, islands and seas on the map. Then use three different colors to draw the trade routes. Make a key. Use the **SoE5.2 Iberian Peninsula 1270-1492 and Late Medieval Trade Routes** maps that your teacher projects for you.

Cities		States	Islands and Regions	Seas
Barcelona	Genoa	Aragon	Majorca	Atlantic Ocean
Palma (Palma de Majorca)	Florence	Castile	The Balearic Islands	Strait of Gibraltar
Valencia	Venice	Portugal	Sicily	Mediterranean Sea
Cordoba	Rome	Granada	Catalonia	Black Sea
Paris	Messina		Maghrib	Red Sea
Bruges	Marseilles			
Tunis	Caffa			
Tripoli	Constantinople			
Algiers	Alexandria			

Trade Routes	Color
Trade Routes dominated by Genoa	
Trade Routes dominated by Venice	
Shared Trade Routes	



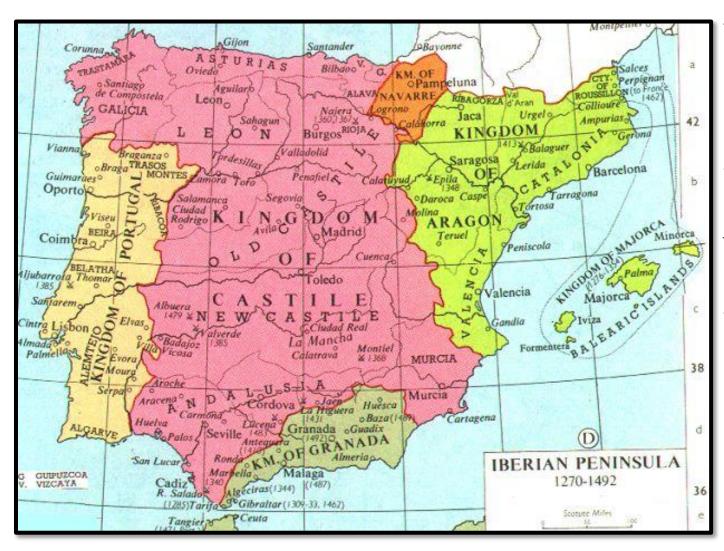
SoE5.1 Majorca and Mediterranean Trade Routes Activity



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SoE5.2 Iberian Peninsula, 1270-1492

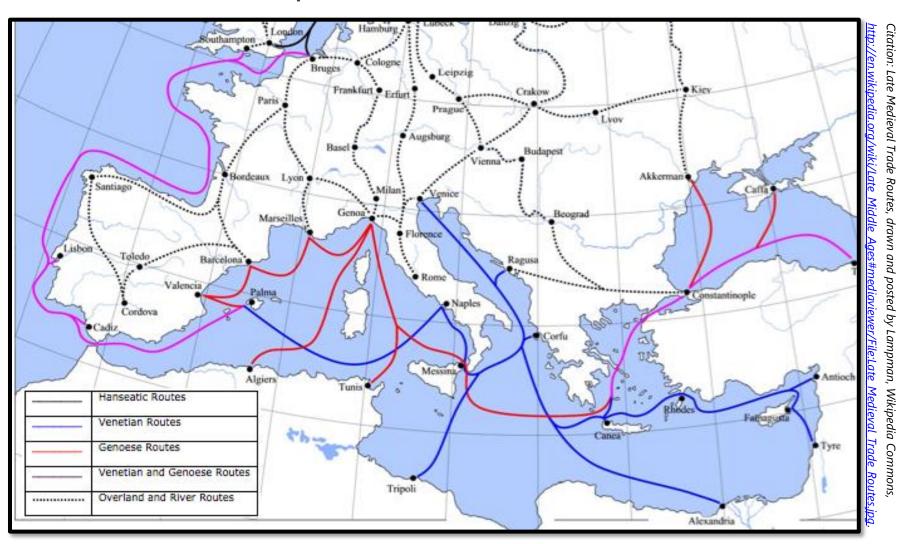


Halsall, 1998-2000, http://www.fordham.edu/halsall/maps/1492spain.jpg. Citation: Map of Iberian Peninsula, 1270-1492, Internet History Sourcebook, edited by Paul from Muir's Historical Atlas (London: Philip & Son, 1911.) The map was adapted

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SoE5.2 Late Medieval Trade Routes Map



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SoE5.3 Majorca and the Afroeurasian World (page 1 of 4)

Group 1

Use your Majorca and Mediterranean Map and the Sites of Encounter in the Medieval World Interactive Map to answer these questions. Be prepared to share your answers with the class.

- 2. In trade circle I, where did merchants from Venice and Genoa (in Italy) meet and trade with merchants from Flanders (in northern Europe)?
- 3. What did they buy and sell?

1. Which trade circles include Majorca?

- 4. What was their method of travel?
- 5. If you were a Catalan merchant living in Barcelona in 1227 and you wanted to expand your trade to more profitable products and trade with more places, where would you start expanding? What trade cities would you visit?



SoE5.3 Majorca and the Afroeurasian World (page 2 of 4)

Group 2

Use your *Majorca and Mediterranean Map* and the *Sites of Encounter in the Medieval World Interactive Map* to answer these questions. Be prepared to share your answers with the class.

- 1. In the 14th century, Genoese, Venetians and Catalans sailed from the Mediterranean to Bruges, Flanders (in northern Europe) to trade. What problem did they have to figure out before they could sail to Bruges? Use Trade Circles map and the information for trade circle I to answer this question.
- 2. What products did they buy and sell?
- 3. Who were the major shippers in the Mediterranean? Use the information for trade circle II to answer this question.
- 4. What ships did they use?
- 5. If you were King James I of Aragon (king of Catalonia and Aragon) and you wanted to expand the trade and shipping of your Catalan merchants and shippers, what trade routes would you try to dominate?



SoE5.3 Majorca and the Afroeurasian World (page 3 of 4)

Group 3

Use your Majorca and Mediterranean Map and the Sites of Encounter in the Medieval World Interactive Map to answer these questions. Be prepared to share your answers with the class.

1. In trade circle IX, who traveled to the North African ports to buy gold? 2. What limit did the Maghribi merchants place on them? 3. How did the Portuguese try to get around this rule? 4. Since both the Catalan merchants and James I wanted to "break into" the very profitable gold trade, what trade cities would give them access to that trade? Who controlled that trade? 5. How do you think the Catalans might have gotten access to trade in that region?



SoE5.3 Majorca and the Afroeurasian World (page 4 of 4)

Group 4

Use your Majorca and Mediterranean Map and the Sites of Encounter in the Medieval World Interactive Map to answer these questions. Be prepared to share your answers with the class.

- 1. Which way does the wind blow at the Strait of Gibraltar? Use the Wind and Ocean Currents map to answer this question.
- 2. In which direction or directions do the Mediterranean Sea currents run in the area around Majorca?
- 3. Since 11th- and 12th-century sailors wanted to sail near the coast rather than across the open sea, what do you think would be the quickest route from Barcelona to Tunis? (Remember the medieval round ships could not sail directly into the wind, and it was very slow for them to sail against the sea current.)
- 4. If you were King James I of Aragon (king of Catalonia and Aragon) and you wanted to expand the trade of shipping of your Catalan merchants and shippers, what important trade power (Venice, Genoa, Mamluk Sultanate in Egypt, Maghribi states in North Africa) would you choose as an ally?
- 5. Using the Trade Routes map, find the shortest trade route across the Mediterranean Sea from west to east. What islands are on this route?



SoE5.4 Majorca and Iberia Background Reading (page 1 of 6)



Citation: Bellver Castle, Palma de Mallorca, Spain, photograph by Ponio160, 2007. Wikipedia Commons,

Instructions: Read the following pages and answer the questions below each paragraph.

Majorca, like Sicily, was an important trading center in the western Mediterranean during the Middle Ages. The island has been an important site of encounter, because of its good location for trade, and its diverse religious groups – Jews, Latin Christians and Muslims. In this lesson, you will also learn about all of Iberia (modern-day Spain and Portugal).

1. Why was Majorca a site of encounter?

Iberia

In the early Middle Ages, most Iberian people became Latin Christians, Christians that followed the pope in Rome and used Latin as a religious language. (As you learned in lesson 1 on Sicily, Greek Christians followed the patriarch of Constantinople and used Greek as a religious language.) There were also many Jews. In 711, Muslim armies conquered most of Iberia, except for tiny Christian kingdoms in the north. The Muslim rulers, the Umayyad Caliphs, called their Iberian territory al-Andalus. Iberian Christians used the name "Moors" for all Muslims in Iberia.

- 2. What were the three religions practiced by the people of Iberia?
- 3. What name did the Umayyads call their land in Iberia?



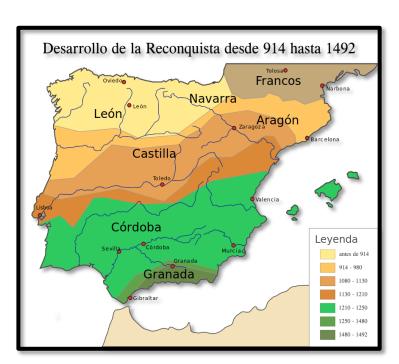
SoE5.4 Majorca and Iberia Background Reading (page 2 of 6)

Al-Andalus was a rich and tolerant society. The Umayyads did not make Christians and Jews convert to Islam, although they had to pay a special tax. Al-Andalus became a wealthy center of Muslim culture. Muslim, Christian and Jewish scholars translated Arabic texts into Latin there, as you learned in Lesson 1.

4. What rules did the Umayyads place on Christians and Jews in Iberia? Were these rules tolerant (treating people of other religions fairly) or intolerant (discriminating against people of other religions)?

At first, the small Latin Christian kingdoms in the north – Castile, Aragon and others – coexisted with al-Andalus. Rulers and people were very aware of the religious differences, but they did not always think of the other religious groups as their enemies. Sometimes the kings of Castile and Aragon fought against al-Andalus and sometimes they would ally, or join military forces, with al-Andalus to fight against each other.

5. Were the Christian kingdoms of Iberia always enemies of al-Andalus? Did Muslim and Christian rulers tolerate each other, or were they intolerant?



Citation: Progress of the Reconquista from 914 to 1492 (Desarrollo de la Reconquista desde 914 a 1492, map created by Macucal, 2013, Wikipedia Commons,

http://commons.wikimedia.org/wiki/File:Reconquista 914-1492.svq

Then, after 1030, al-Andalus became weak and began to fall apart into little states. Christian kings began to gain more and more territory, pushing their borders southward. 1097, Latin Christian crusaders began fighting against Muslims in Palestine. Like the crusaders, the kings of Castile and Aragon began to use religious differences to gain power and motivate knights to fight. Supported by the pope and Latin Christian priests, the kings said that they were reconquering, or taking back, "Christian" land that had been taken away by the Muslims. They called this military effort the "Reconquista," a Spanish word meaning reconquest. In 1212, the kings of Aragon and Castile won a huge victory at the battle of Las Navas de Tolosa, and by 1260, the Muslim Almohad rulers lost all their land except Granada.



SoE5.4 Majorca and Iberia Background Reading (page 3 of 6)

All the rest of the peninsula was ruled by Latin Christian kings. Portugal controlled the west, Castile controlled the middle, and Aragon controlled the east of Iberia.

- 6. What happened to the Latin Christian kingdoms of Castile and Aragon after al-Andalus fell apart?7. What was the Reconquista?
- 8. What ideas did the Christian kings use to motivate their knights to fight? Were these ideas tolerant or intolerant?
- 9. After 1212, how much of Iberia did Aragon, Castile and Portugal control? How much did the Muslim Almohad rulers control?

By the 1250s, many Muslims and Jews had come under the Latin Christian rule. At first, the kings practiced tolerance towards their Muslim and Jewish subjects. Centuries of living together taught these groups how to coexist peacefully. Muslims and Jews kept their own separate laws, governed their own communities, and practiced their religions. Muslims, Christians and Jews often lived in separate neighborhoods and did not marry each other, but they joined together in business deals, worked together, and traded with each other. However, priests and kings continued to preach to common people that Christianity was better than Islam and Judaism. They continued to spread the crusading idea that Christians should fight Muslims. Over time, people became less tolerant of Muslims and Jews.

- 10. How were Christians, Muslims and Jews divided from each other?
- 11. How were Christians, Muslims and Jews connected to each other?
- 12. Were the Christian Iberian kingdoms tolerant or intolerant? Explain your answer.
- 13. What made Christians less tolerant?

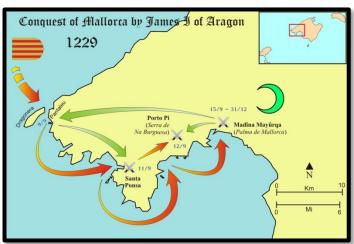


SoE5.4 Majorca and Iberia Background Reading (page 4 of 6)

Majorca

In the 1200s, Majorca was ruled by the Muslim Almohads. It was a major trade city for merchants from Catalonia (one of the regions in Aragon), the Italian city-states (Pisa, Genoa, and Venice), and North Africa. Majorca's favorable location in the Mediterranean made the Catalan merchants in Barcelona (who were both Latin Christians and Jews) and their rulers (from Aragon) want to control the island. The Catalan merchants wanted to break into the gold trade with the Maghrib and the spice and Asian products trade controlled by Venice and Genoa.

14. Why did the Catalan merchants want to control Majorca?



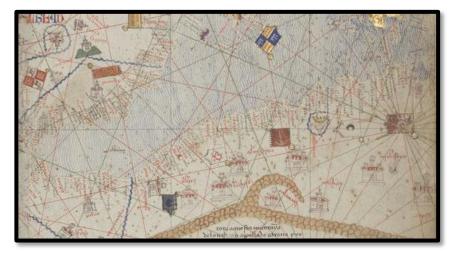
Citation: Conquest of Mallorca by James I of Aragon (1229) Map, created by Luis García, 2007, Wikipedia Commons, http://commons.wikimedia.org/wiki/File:Conquest of Mallorca by James I of Aragon 01.jpg. Majorca is spelled "Mallorca" in Spanish.

King James I of Aragon wanted to expand his kingdom and increase his wealth. He wanted the large taxes from the trade there. James also wanted to be known as a crusader for Christianity. Like King Roger I of Sicily, he had both religious and economic reasons to attack the Almohad kingdom of Majorca. He conquered the island in 1229. Because the Almohad Majorcan rulers had resisted King James, he took away all their property and exiled them, or kicked them off Majorca. But he also used and protected Jewish officials and merchants, and he later let other Muslims from Iberia (who had not resisted him) move to Majorca.

- 15. Why did King James I of Aragon want to conquer Majorca?
- 16. What were King James's policies towards Muslims and Jews? Which policies were tolerant? Which were intolerant?



SoE5.4 Majorca and Iberia Background Reading (page 5 of 6)



Detail of the Mediterranean Sea and the coasts of Iberia and the Maghrib, Catalan Atlas, 1375.

Citation: Abraham Cresques, Atlas de cartes marine, dit [Atlas Catalan], 1375, Bibliothèque nationale de France, Département des manuscrits, Espagnol 30, arc:/12148/btv1b55002481n, gallica.bnf.fr

At Majorca, Catalan, Genoese and Jewish Maghribi merchants took over the gold trade between the Maghrib and Europe. Majorca became a center for sailing knowledge, ship building, and production of portolan charts and maps, such as the Catalan Atlas. At Majorca and other sites of encounter in the Mediterranean, Muslim, Jewish, and Christian sailors combined knowledge, experimented with new ideas, and created new and improved naval technologies and faster, safer, and more sea-worthy ships. You will learn more about these technologies later in the lesson.

17. What technologies were exchanged in Majorca and Iberia?

Iberian merchants and rulers wanted to gain profits from trade, and these naval technologies gave them huge advantages. In the 1270s the Genoese, Venetians and Catalans opened a sea trade route with Bruges in northern Europe. Iberians also sailed south exploring the west African coast, looking for access to the gold trade. Their first stop was the Canary Islands, where Majorcan missionaries tried to convert the Canarians to Christianity after 1345. After 1440, Portuguese ships sailed further and further down the west coast of Africa, looking for gold and also slaves. In 1497, Vasco da Gama sailed around the tip of Africa (the Cape of Good Hope) and into the Indian Ocean, where he tried to buy spices in India. The Spanish and Portuguese used these technologies to cross the Atlantic ocean and explore the Americas. On the Canary Islands, Iberians created a system where African slaves worked on sugar plantations. The Spanish and Portuguese later imported this plantation system and a new form of slavery into the New World.

18. What did the Iberians do with their new and improved ships?



SoE5.4 Majorca and Iberia Background Reading (page 6 of 6)

19. What did Iberians create on the Canary Islands? What effect did this have on the New World?

At the same time (in the 14th and 15th centuries), relations between the ruling Christians and religious minorities of Muslims and Jews on the Iberian peninsula worsened. As the Christian kingdoms got stronger, they grew less tolerant. Muslims fled the Christian kingdoms for Muslim kingdoms in North Africa. Iberian Christians began persecuting Jews by stealing their property, breaking their windows, beating them up, and trying to force Jews to convert to Christianity.

20. What happened to relations among Christians, Jews and Muslims in the 14th and 15th centuries?



Citation: Statue of Queen Isabella of Castile, created by Felipe Bigarny, 16th century, at the Capilla Real of Granada. Photograph by Shakko, 2008, Wikipedia Commons, http://commons.wikimedia.org/wiki/File:Isabella by Bigarny 01.jpg.

In 1469, the heir to the Crown of Aragon, Ferdinand, married the heiress of Castile, Isabella. By their marriage, they unified the two kingdoms into the kingdom of Spain, although that union was not official until the 18th century. In 1492, Ferdinand and Isabella conquered the kingdom of Granada, the last Muslim kingdom on the Iberian peninsula. They also expelled, or kicked out, all the Jews from Spain. In the same year, they financed Christopher Columbus's first voyage. These three acts symbolize how Iberia had changed from the coexistence of the three religious groups in earlier centuries. Now Iberia was to be exclusively Christian and its explorers were to spread the Christian religion by the sword.

21. How did Aragon and Castile become Spain?

22. What three things did Ferdinand and Isabella do in 1492?



SoE5.5 Majorca and Iberia Timeline

Instructions: Copy the timeline below onto a piece of paper. Then place these events in their proper place on your timeline. Add images and icons as appropriate. You will find the dates in the **SoE5.4 Majorca and Iberia Background Reading**.



Events

Muslim armies conquered most of Iberia

Al-Andalus fell apart into small states

Aragon, Castile & Portugal took over most of Iberia except Granada

King James I of Aragon conquered Majorca

Genoese, Venetians and Catalans opened a sea trade route to Bruges

Majorcan missionaries went to the Canary Islands

Portuguese ships began sailing further down the west coast of Africa

Vasco da Gama sailed around Africa to India

Ferdinand of Aragon married Isabella of Castile

Ferdinand and Isabella conquered Granada, funded Columbus, and exiled the Jews from Spain



SoE5.5 Majorca and Iberia Change over Time Chart

Instructions: One of the most important patterns historians study is change over time, or how people and states change as time passes. To analyze change over time in Majorca and Iberia, organize the big ideas from **SoE5.4 Majorca and Iberia Background Reading** on this chart.

Categories	700-1100	1100-1300	1300-1500
Rulers of Majorca and Iberia (names, religions, dates)			
Policy of rulers towards other religions. (Were they tolerant of other religions? Explain.)			
Exchanges (What products, ideas, or technologies were exchanges between people and cultures?)			
Effects of Exchanges (How did these exchanges affect relations between religious groups? How did they affect trade and exploration?)			



SoE5.6 King James I, Book of Deeds (page 1 of 3)

Introduction: James I was king of Aragon from 1217 to 1276. He expanded the Crown of Aragon by conquering Majorca and Valencia, so he is sometimes called James the Conqueror. He wrote, or probably dictated, an autobiography called the Book of Deeds. In these excerpts, he explained, in the first person (I, me), his actions in Majorca. None of the excerpts below directly answer the lesson focus question, "What were the effects of the exchanges at Majorca?" but each paragraph contains evidence that helps explain why James and the Catalan merchants wanted Majorca, how Christians, Muslims and Jews coexisted and/or fought with each other, and why improvements in ship technology were needed. For each of the paragraphs below, there is an important idea written in italic print. Find one piece of evidence in the paragraph that supports that idea and write it in the space provided. Rewrite the evidence in your own words. Be sure to use names, places, and specific details in your evidence.



Citation: Conquest of Majorca mural, by the Master of Majorca Conquest Mural, 1285-90, Museu Nacional d'Art de Catalunya (National Museum of Catalan Art), Google Art Project, http://commons.wikimedia.org/wiki/File:Master of the Conquest of Majorca - Google Art Project.jpg

Paragraph 1

Pere Martel, a citizen of Barcelona, who had great knowledge of the sea, invited me to dinner one day, and all the barons who were with me. Towards the end of dinner a conversation began among them. And I asked: "What kind of country is Majorca, and what is the extent of that kingdom?" They asked Pere Martel, because he was a shipmaster; and Pere Martel said that he would give an account of it, as he had been there once or twice. . . When dinner was over, they came before me, and said: "My lord, we have asked Pere Martel about Majorca, and he has told us something we think will please you. It is a good-sized island, in the midst of other smaller islands, called Minorca, Ibiza, and Formentera, all of which are subject to the King of Majorca". . . .

Vocabulary

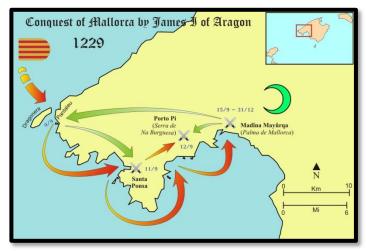
Citizen of Barcelona = a commoner (not a noble) who lives in Barcelona

Barons = noble knights

are subject to = are
ruled by



SoE5.6 King James I, Book of Deeds (page 2 of 3)



Citation: Conquest of Mallorca by James I of Aragon (1229) Map, created by Luis García, 2007, Wikipedia Commons, http://commons.wikimedia.org/wiki/File:Conquest of Mallorca by James I of Aragon 01.jpg. Majorca is spelled "Mallorca" in Spanish.

Paragraph 1 Idea: Catalan merchants encouraged King James I to conquer Majorca.

Evidence:

Paragraph 2

[I] saw Majorca in the distance, and it seemed to me the finest city I had ever seen, and those who were with me thought the same. . . .

Paragraph 2 Idea: King James I of Aragon wanted to conquer Majorca.

Evidence:

Paragraph 3

After [James began to attack Majorca], when the Saracens saw that they could not maintain the defense, they sent us a message to say that they wished to speak with a messenger of ours [about surrendering]. . . . I then sent there Don Nuño, with ten of his own retainers on horseback, and a Jew of Saragossa, who knew Arabic, as interpreter; and his name was Don Bahihel.

Paragraph 3 Idea: King James I used Jewish officials to help rule Aragon.

Evidence:

Vocabulary

Saracens = Muslims

Retainers = knights who protected and served Don (Lord) Nuño

Saragossa = a town in Aragon, also written as Zaragoza

Paragraph 4

I ordered how the fleet should go . . . [and] I collected fully one thousand men in boats who wished to go with us. . . . When I had gone 20 miles [through the] sea, the wind changed to the southwest and the sailing masters of my galley came together with the sailors and said: "My lord, we are your subjects and are bound to



SoE5.6 King James I, Book of Deeds (page 3 of 3)

guard you life and limb, and to give you good advice as well as we know. This southwest wind is not good for us or for your fleet, rather it is against us [so] that you cannot make [it to] the island of Majorca with it. By our advice you will put about and go back to land. When I heard these words and counsel, I told them that I would not do so. . . . I was going on this expedition for the love of God and against those who do not believe in Him. . . and I had faith that He would guide us."

Paragraph 4 Idea: Ships of the early 13th century needed a lot of technological improvements to make them sea-worthy.

Vocabulary

galley = a type of boat

southwest wind is not good for us = the wind was blowing in the wrong direction

put about = turn around

Evidence:

Paragraph 5

In this paragraph, James I was talking to two Muslims. "We" means James. [We told them that] there were many Saracens in our own lands, and that from times past our dynasty had kept them in Aragon . . . and all keep their own way of life, as well as if they were in a land of the Saracens, and they had come before our mercy and had submitted to us. And those who would not submit we had to take by force and people their land with Christians.

Paragraph 5 Idea: King James I was tolerant to Muslims as long as they submitted to him. If they fought him, he exiled them.

Evidence:

Vocabulary

dynasty = James's ancestors
who ruled Aragon

come before our mercy and had submitted = the Muslims had gone to James's court, bowed down to him, and swore they would obey his rule

people their land = give the
Muslims' land to Christians

exiled = kicked them out of the state

Text Citation: James I of Aragon, The Book of Deeds, translated by John Forster, 1857, online at Library of Iberian Sources Online, http://libro.uca.edu/chronicleofjames/chronicle.htm, chapters 47, 57, 61, and 74. Paragraph 5 translation is quoted from Felipe Fernández-Armesto, Before Columbus: Exploration and Colonisation from the Mediterranean to the Atlantic 1229-1492 (Philadelphia: University of Pennsylvania Press, 1987, p.77, of the Book of Deeds, chapter 436-437.



SoE5.7 Investigating the Catalan Atlas (page 1 of 14)

Teacher Instructions

Option 1: There is an online exhibition of the Catalan Atlas at the website of the Bibliothèque Nationale (National Library) of France. It has excellent high resolution enhanced photographs of different parts of the atlas, and using it is the best option for your students. The navigation words and all text are in French, but do not let this discourage you from using the site. The following directions and activity tells you (and your students) all you need to know to access the photographs and examine the Catalan Atlas closely.

Step 1: Access the website and prepare to project photographs for your students:

Go to http://expositions.bnf.fr/marine/albums/catalan/index.htm

Click on "Feuilleter l'album" (Page through the album)

In the bottom right corner, the photographs are numbered 1/26 followed by an arrow. Advance to 4/26. (You may wish to hide 1/26 and 2/26 from your students, as there is a naked male body on those photographs.)

Step 2: Distribute pages 3-6 of this handout to students. Display the listed photograph, read over the title and introductory notes with students and then let them answer the questions individually. Review the answers and advance to the next photograph.

Photograph # (of 26)	Question(s)	Photograph # (of 26)	Question(s)
4	1-6	14	17-18
7	7-10	16	19
8	11	18	20-21
9	12-14	20	Avoid - nudity
13	15-16	23	22

See further instructions on the next page below the description of Option 2.



SoE5.7 Investigating the Catalan Atlas (page 2 of 14)

Option 2: If it is not possible to display the higher resolution images, have students answer the questions using the low-resolution images on pp. 7-12 of the 14 pages of this handout. They will not be able to make out as much detail. Project the photos and questions from pp. 7-12, and have students answer the questions on a separate piece of paper.

Whichever option you use, at the end divide students into groups and distribute pages 13 and 14 to them. Have them discuss the questions in groups, record their answers, and conclude with a discussion of their interpretations. In this final activity, on p. 14, students will be comparing Al-Idrisi's map from the *Book of Roger* with the *Catalan Atlas* of Abraham Cresques.

The key points for students to understand are:

- In the more than 200 years between the creation of the two maps, Mediterranean mapmakers had gained significant geographical and navigational knowledge.
- Cresques drew the landforms and seaforms more accurately than Al-Idrisi did.
- Cresques added rhumb lines, which were used with a compass and compass rose to navigate.
- On the Catalan Atlas, there are many more names of places along the coastlines. The coastlines are very accurately drawn, which was also useful for navigation.

Citation for all maps on pp. 7-12: Abraham Cresques, Atlas de cartes marine, dit [Atlas Catalan], 1375, Bibliothèque nationale de France, Département des manuscrits, Espagnol 30, arc:/12148/btv1b55002481n, gallica.bnf.fr.



SoE5.7 Investigating the Catalan Atlas (page 3 of 14)

Student Handout - Option 1

Instructions: Answer the questions below as your teacher shows you the enlarged photographs. URL: http://expositions.bnf.fr/marine/albums/catalan/index.htm.

Photograph 4/26: This photograph shows four panels of the Catalan Atlas. It is hard to make out details on this photograph, because the panels are each 65×50 centimeters (or $2' \times 1-1/2'$). The rest of the photographs in this album are enlargements of smaller details.









The Catalan Atlas was produced in Majorca in 1375 by a Jewish mapmaker named Abraham Cresques (some historians think that Cresques was his first name, and call him Cresques Abraham.) Prince John of Aragon ordered (and paid for) the atlas to give it as a present to the French King Charles VI. To make the atlas, Abraham Cresques used information from Islamic, Jewish and Latin Christian maps, geography books, and travel accounts, and oral information from sailors and merchants. The atlas has twelve panels drawn on parchment and mounted on six wooden boards. These four panels show Europe, North Africa and western Asia. On the first panel is a compass rose. The lines that crisscross the map are called rhumb lines. Medieval sailors used them for navigation.

- 1. What part of this photograph have you seen before (in the previous lesson on Mali)?
- 2. On the first panel is a compass rose. How many directions does it point to?
- 3. Find the Mediterranean Sea. What do you notice along the coastlines of the Italian and Iberian peninsulas?
- 4. What color is Sicily?



SoE5.7 Investigating the Catalan Atlas (page 4 of 14)

- 5. How many islands are there around Majorca? What colors are Majorca?
- 6. What animals do you see?



Photograph 7/26: This photograph shows the west coast of Africa (from the bottom of the first panel on 4/26) and the Atlantic Ocean. The map shows the Canary Islands and some imaginary islands also. The boat at the bottom represents the lost ship of the Catalan explorer Jaume Ferrer, who sailed from Majorca in 1346 to find the "River of Gold," probably the Senegal River. His effort to find a direct route to Mali and the goldfields of West Africa ended in disaster. His ship never returned to Majorca. Look at

the coastline of Africa and all the words written along the coast. Those are the names of towns and physical features along the coast.

- 7. Draw the symbol that stands for a town.
- 8. How many men are in the ship?
- 9. How many sails does the ship have?
- 10. What are the colors on the flag? (This is the flag of Aragon.)



Photograph 8/26: This photograph shows West Africa. The golden bar at the top represents the Atlas Mountains.

11. Judging by the symbols, what did people in Majorca know about the Sahara and Mali? List 3 things.



SoE5.7 Investigating the Catalan Atlas (page 5 of 14)



Photograph 9/26:

- 12. What is the name of the body of water at the top of this map?
- 13. What does the golden bar represent?
- 14. About what parts of the land did the mapmaker have the most information?



Photograph 13/26: This map shows Egypt and the Nile River. The figure in the center is named as the "King of Babylon," the Majorcan name for the Mamluk Sultan.

- 15. What color is the Red Sea?
- 16. What animals do you see?



Photograph 14/26: This photograph shows 4 panels of the Asian part of the map. Abraham Cresques did not know as much about eastern Asia as he did about the Mediterranean. This part of the atlas is not as accurate, and it has many more imaginary figures from stories and legends. Notice that some of the figures are upside-down and sideways. Abraham Cresques intended that the big map panels would be set on a square table and people would walk around the table to look at each edge.

- 17. What are two animals shown on these panels?
- 18. How many kings do you see? How many queens do you see?



SoE5.7 Investigating the Catalan Atlas (page 6 of 14)



Photograph 16/26: This photograph shows the west coast of India. Notice the men diving for pearls.

19. What type of ship was Abraham Cresques trying to represent? (Hint: look at the sail)



Photograph 18/26: This photograph shows a camel caravan traveling to China. Abraham Cresques used information from Marco Polo's travel account, including the names of 29 Chinese cities.

- 20. How many men are traveling on foot?
- 21. How many men are riding on horses?



Photograph 23/26: This photograph shows the Spice Islands.

22. Why do you think the mapmaker marked these islands with many colors?



SoE5.7 Investigating the Catalan Atlas (page 7 of 14)

Student Handout - Option 2

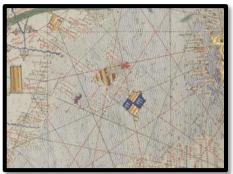












4/26: These photographs show four panels of the Catalan Atlas. It is hard to make out details, because the panels are each 65×50 centimeters (or $2' \times 1-1/2'$). The rest of the photographs in this handout are enlargements of smaller details.



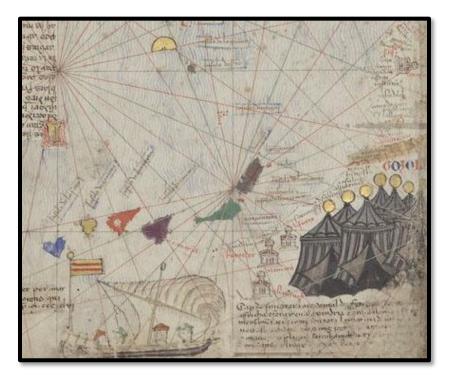
SoE5.7 Investigating the Catalan Atlas (page 8 of 14)

The Catalan Atlas was produced in Majorca in the 1370s by a Jewish mapmaker named Abraham Cresques (some historians think that Cresques was his first name, and call him Cresques Abraham.) Prince John of Aragon ordered (and paid for) the atlas to give it as a present to the French King Charles VI. To make the atlas, Abraham Cresques used information from Islamic, Jewish and Latin Christian maps, geography books, and travel accounts and oral information from sailors and merchants. The atlas has twelve panels drawn on parchment and mounted on six wooden boards. These four panels show Europe, North Africa and western Asia. On the first panel is a compass rose. The lines that crisscross the map are called rhumb lines. Medieval sailors used them for navigation.

gatior	1.
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2.	On the first panel is a compass rose. How many directions does it point to?
3.	Find the Mediterranean Sea. What do you notice along the coastlines of the Italian and Iberian peninsulas?
4.	What color is Sicily?
5.	How many islands are there around Majorca? What colors are Majorca?
6.	What animals do you see?



SoE5.7 Investigating the Catalan Atlas (page 9 of 14)

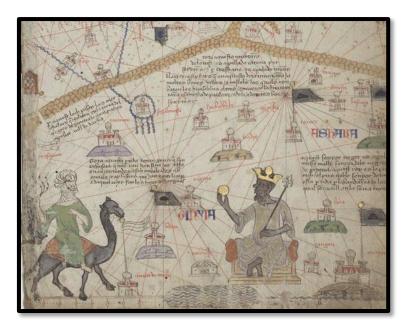


7/26: This photograph shows the west coast of Africa (from the bottom of the first panel on 4/26) and the Atlantic Ocean. The map shows the Canary Islands and some imaginary islands also. The boat at the bottom represents the lost ship of the Catalan explorer Jaume Ferrer, who sailed from Majorca in 1346 to find the "River of Gold," probably the Senegal River. His effort to find a direct route to Mali and the goldfields of West Africa ended in disaster. His ship never returned to Majorca. Look at the coastline of Africa, and see the words written sideways along the coast. Those are the names of towns and physical features along the coast.

- 7. Draw the symbol that stands for a town.
- 8. How many men are in the ship?
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- 10. What are the colors on the flag? (This is the flag of Aragon.)

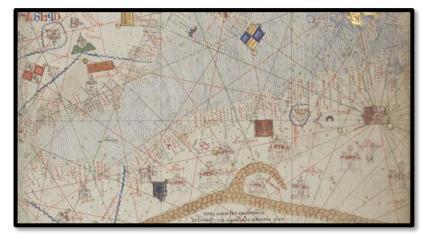


SoE5.7 Investigating the Catalan Atlas (page 10 of 14)



8/26: This photograph shows West Africa. The golden bar at the top represents the Atlas Mountains.

11. Judging by the symbols, what did people in Majorca know about the Sahara and Mali? List 3 things.

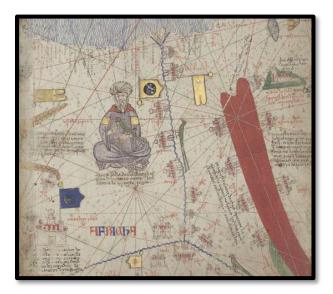


9/26:

- 12. What is the name of the body of water at the top of this map?
- 13. What does the golden bar represent?
- 14. About what parts of the land did the mapmaker have the most information?



SoE5.7 Investigating the Catalan Atlas (page 11 of 14)



13/26: This map shows Egypt and the Nile River. The figure in the center is named as the "King of Babylon," the Majorcan name for the Mamluk Sultan.

- 15. What color is the Red Sea?
- 16. What animals do you see?

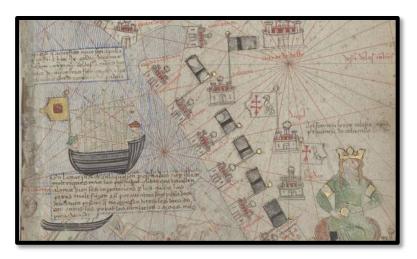


14/26: This photograph shows 4 panels of the Asian part of the map. Abraham Cresques did not know as much about eastern Asia as he did about the Mediterranean. This part of the atlas is not as accurate and it has many more imaginary figures from stories and legends. Notice that some of the figures are upside-down and Abraham Cresques sideways. intended that the big map panels would be set on a square table and people would walk around the table to look at each edge.

- 17. What are two animals shown on these panels?
- 18. How many kings do you see?



SoE5.7 Investigating the Catalan Atlas (page 12 of 14)



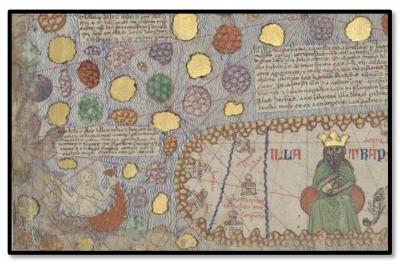
16/26: This photograph shows the west coast of India. Notice the men diving for pearls.

19. What type of ship was Abraham Cresques trying to represent? (Hint: look at the sail)



18/26: This photograph shows a camel caravan traveling to China. Abraham Cresques used information from Marco Polo's travel account, including the names of 29 Chinese cities.

- 20. How many men are traveling on foot?
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23/26: This photograph shows the Spice Islands.

22. Why do you think the mapmaker marked these islands with many colors?

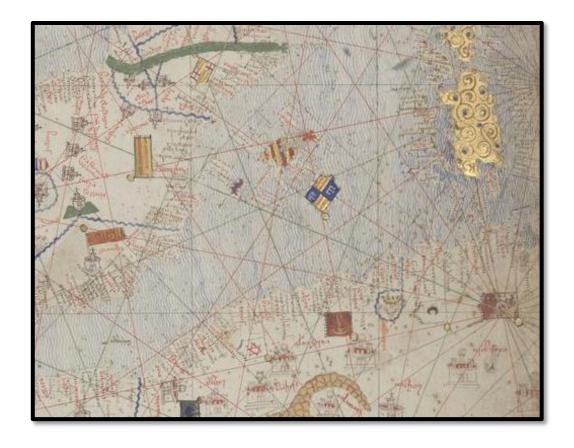


SoE5.7 Investigating the Catalan Atlas (page 13 of 14)

Al-Idrisi, The Book of Roger, 1157



Abraham Cresques, Catalan Atlas, 1375





SoE5.7 Investigating the Catalan Atlas (page 14 of 14)

Instructions: Look at the two maps from the Book of Roger *and the* Catalan Atlas *on the previous page to answer the questions.*

- 1. How many years had passed between the creation of the *Book of Roger* and the creation of the *Catalan Atlas*?
- 2. These two maps show the same area of the western Mediterranean Sea. Compare and contrast these maps on the chart below. Look at the islands, the shape of the landforms and seas, the number of words written (which show how much knowledge and precise detail the mapmakers had), the presence of navigational aids (such as rhumb lines.) List two things that are the same on the two maps.
- 3. List four things that are different on the two maps. In the first column, write the feature. In the second column, describe how the feature is shown on Al-Idrisi's map. In the third column, describe how the feature is shown on Cresques's map. The first one is done for you.

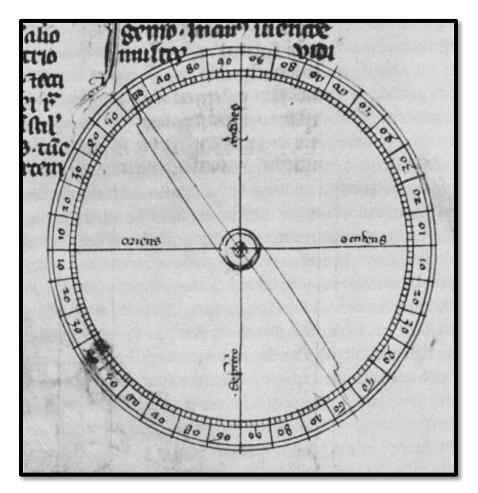
Feature	Al-Idrisi, The Book of Roger, 1157	Abraham Cresques, Catalan Atlas, 1375
Rhumb lines (for navigation)	There are no rhumb lines	There are lots of rhumb lines

- 4. Which map is more accurate? (Compare to your **SoE5.1 Mediterranean Map**.)
- 5. Based on the differences between the two maps, *Book of Roger* and *Catalan Atlas*, what knowledge had Mediterranean mapmakers gained between 1157 and 1375? How do you think they gained that knowledge?



SoE5.8 Analyzing Naval Technology (page 1 of 6)

Visual #1: The Compass



Ancient and early medieval sailors had no knowledge of latitude and longitude. To sail in the Mediterranean they followed the coastlines, or went from island to island across the center of the sea. To go faster and to travel to unknown places, they needed a better system of navigation.

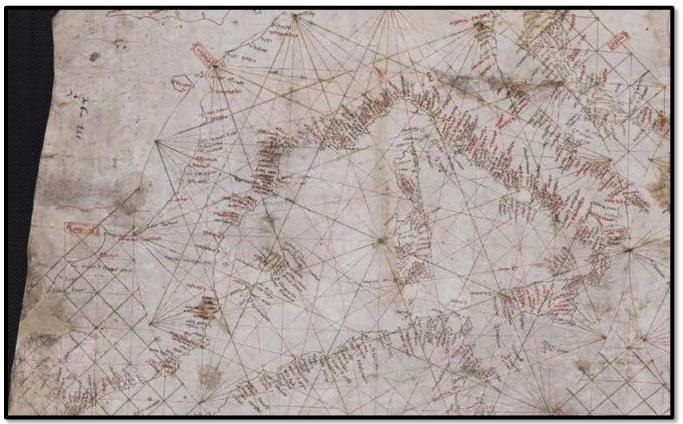
The Chinese invented the compass and improved it to work on ships by the early 12th century. Compasses appeared in Islamic world and Christendom in the next century (1200s). Historians do not know how this technology traveled from the Indian Ocean to the Mediterranean. But once the Mediterranean sailors had the compass, they could use it to calculate their position and the direction to travel by using a compass rose and rhumb lines on a sea chart. Their compass was a magnetized pointer floating in a bowl of water.

Citation: Letter about the Magnet [Epistola de magnete], by Petrus de Maricourt, originally written in 1269. This diagram is from a 14th-century copy. The Bodleian Libraries, University of Oxford, http://commons.wikimedia.org/wiki/File:Epistola-de-magnete.jpg.



SoE5.8 Analyzing Naval Technology (page 2 of 6)

Visual #2: The Portolan Chart, or Sea Chart



Citation: Pisa Chart [Carte marine de l'océan Atlantique est, de la mer Méditerranée et d'une partie de la mer Noire, connue sous le nom de Carte Pisane], 1300, Bibliothèque nationale de France, ark:/12148/btv1b59011825, gallica.bnf.fr.

Portolan charts were very practical drawings of sea and landforms. The coastlines were the most detailed and precise parts of the chart. The names of ports and land features were written sideways along the coastlines. These new charts were made for sailors and shippers their way around the find Mediterranean. Mapmakers got the latest information from sailors to make sure that the portolan charts were accurate. They were written in vernacular languages, such as Catalan, French or Italian (not Latin.) The interior land was not as accurate as the coastlines. The charts were crisscrossed with rhumb lines so that navigators could use them with compasses. The first portolan charts were drawn in the 13th century. This one is the Pisa Chart, drawn around 1300.



SoE5.8 Analyzing Naval Technology (page 3 of 6)

Visual #3: Lateen & Square Sails



Citation: Model of a Portuguese Caravel, Musée de la Marine, Paris, photograph by Phgcom, Wikipedia Commons, http://en.wikipedia.org/wiki/Caravel#mediaviewer/File:Potugu



Woche 2007. Nachbau der bei Bremen 1962 aufgefundenen Bremer Kogge von 1380], photograph by VollwertBIT, Kiel 2007, Wikipedia Commons, http://commons.wikimedia.org/wiki/File:Kieler Hansekogge 2

Citation: Copy of a Hanse Cog based on the Bremen Cog oj 1380 [Segelschiff (Kogge) Kieler Hansekogge auf der Kieler

Two types of sails were known to Europeans in the 13th century – the lateen sail, used in the Mediterranean, and the square sail, used in the north Atlantic and Baltic Seas.

The square sail was invented by the Vikings (and other people in other places) by the 9th century. It worked very well when the wind was blowing in the direction that the sailors wanted to go, or behind the boat. It gathered a lot of wind and made the boat go fast. If the wind was blowing to the side of the boat or to the front, the square sail didn't help at all. Northern sailors introduced the square sail to Mediterranean sailors in the 13th century.

The lateen sail was probably invented in the eastern Mediterranean before the 6th century. It was shaped like a triangle and attached so that it could be moved in almost any direction. It caught the wind blowing to the side of the boat and used it to send the boat forward. With a lateen sail, a boat could go forward in any wind, except a wind blowing directly to the front of the boat.

The real advantage was to use BOTH sails on the ship. Sailors and ship designers figured out how to do this by 1450 in Majorca and Iberia.



SoE5.8 Analyzing Naval Technology (page 4 of 6)

Visual #4: The Astrolabe



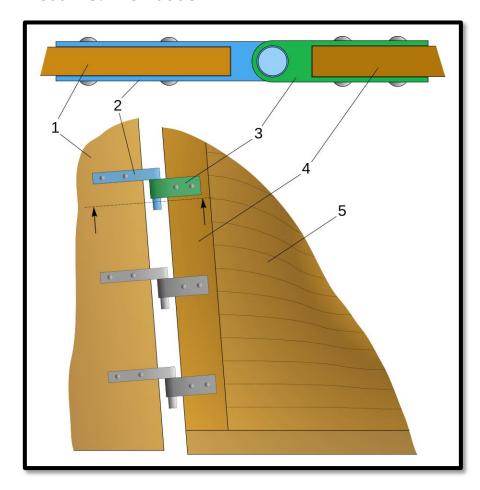
Astrolabes, common in the Islamic world, were part of the technology that Europeans learned about in al-Andalus. To figure out his latitude, the sailor held up the astrolabe by the top ring, and lined up the bar with a heavenly body, such as the sun, moon, or a star. He then read the angle between the bar and the horizon (where the land and sky met) from the numbers on the outside circle of the astrolabe. Astrolabes were good instruments for determining latitude, but they were hard to use on a moving ship. By experimenting, Iberians, especially the Portuguese, developed a mariner's astrolabe in the 15th century. Astrolabes allowed sailors to sail out of the sight of land and still be able to determine where they were and in what direction they should go.

Citation: Astrolabe made by Ahmed Ibn Khalaf between 905 and 987 [Astrolabe Arabe construit par Ahmed ibn Khalaf], Bibliothèque nationale de France, photograph from Charles de la Roncière, La Découverte de l'Afrique au Moyen Âge: Cartographes et Explorateurs (Cairo: Société royale de géographie d'Égypte, 1924-27), Vol. 1, Plate III.



SoE5.8 Analyzing Naval Technology (page 5 of 6)

Visual #5: The Rudder



Rudders guide ships. They have to be strong enough to hold when the sea is very rough.

1 = Rudder

5 = Stern (back) of the ship

2, 3, 4 = attachments

This rudder design is very strong and could guide a ship through the rough waters of the Atlantic Ocean.

The Chinese and Arabs also had rudders on their ships, but they used a different design to attach their rudders to the stern. The design you see at the left was invented in northern Europe (the North or Baltic Seas) in the 12th century. This rudder was adopted by Mediterranean sailors in the 14th century and used on European ships during the voyages of exploration.

Citation: Scheme of a pintle-and-gudgeon system of medieval and early modern ships with sternpost-mounted rudder, diagram by Eric Gaba, 2008, Wikipedia Commons,

http://commons.wikimedia.org/wiki/File:Pintle and gudgeon rudder system s



SoE5.8 Analyzing Naval Technology (page 6 of 6)

Instructions: Analyze each of the visuals to fill in the chart.

Technology	What did it do?	Was it helpful?	Where did it come from?
1			

Which of these technologies were exchanges and which were new creations?

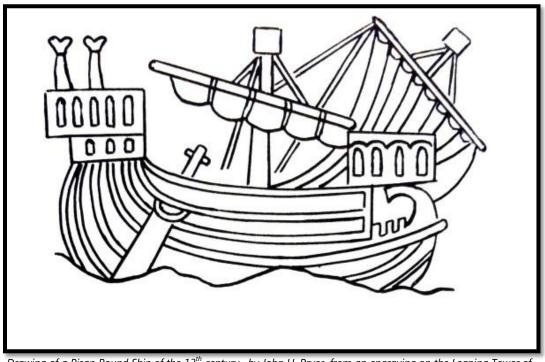
What was the effect of the exchange of naval technologies in the Mediterranean?



SoE5.9 Improving Ship Design (page 1 of 6)

Instructions: Look carefully at each visual and describe what you see.

Ship #1: The Round Ship, 11-13th centuries



Drawing of a Pisan Round Ship of the 13th century, by John H. Pryor, from an engraving on the Leaning Tower of Pisa, from Geography, Technology, and War: Studies in the maritime history of the Mediterranean, 649-1571, by John H. Pryor, Past and Present Publications (Cambridge: Cambridge University Press, 1988), fig. 7, p. 31. Courtesy of John H. Pryor and the Past and Present Society.

Notice that the round ship does not have a rudder at the stern. Instead it has a steering oar for guidance. Steering oars did not work as well as rudders.



SoE5.9 Improving Ship Design (page 2 of 6)

Ship #2: The Cog, 13th-14th centuries in the Mediterranean (12th-15th centuries in the North and Baltic Seas)



Citation: Model of the Bremen Cog of 1380 [Modell der Bremer Kogge von 1380], photograph by Heinz-Josef Lücking, 2010, Wikipedia Commons, http://commons.wikimedia.org/wiki/File:Mod



Citation: Copy of a Hanse Cog based on the Bremen Cog of 1380 [Segelschiff (Kogge) Kieler Hansekogge auf der Kieler Woche 2007.

Nachbau der bei Bremen 1962 aufgefundenen Bremer Kogge von 1380], photograph by VollwertBIT, Kiel 2007, Wikipedia Commons, http://commons.wikimedia.org/wiki/File:Kieler Hansekogge 2007 vorne.jpg

Here are two representations of the Cog. Both are photographs of modern copies of a cog. The first is a full-sized ship based on a 1380 cog that sunk in Bremen, Germany, and the second is a model.



SoE5.9 Improving Ship Design (page 3 of 6)

Ship #3: The Caravel, 1450-1600



Citation: Model of a Portuguese Caravel, Musée de la Marine, Paris, photograph by Phgcom, Wikipedia Commons, http://en.wikipedia.org/wiki/Caravel#mediaviewer/File:PotugueseCaravel.ipg

By 1450, the Portuguese had developed the caravel. This is a modern model of a caravel. A later caravel, called the *caravela redonda*, had one square sail and one lateen sail. Caravels had one advantage the photograph doesn't show – they were light in weight, and therefore they could sail very fast.



SoE5.9 Improving Ship Design (page 4 of 6)

Ship #4: The Catalan Não, 1450-1600



The Catalans developed a ship, which they called a não. It was the first ship that had both a lateen sail and a square sail. This model ship below represents a não, although it only has one sail. It is known as the Mataro model and was built between 1456 and 1482. Someone, probably a sailor, gave the model as a votive gift (a gift to thank a saint for protection) to a chapel in Mataro, Spain.

What do you see?

Citation: Mataro Model, from the Maritime Museum in Rotterdam, photograph by Joop Anker, 2009, Wikipedia Commons,

http://commons.wikimedia.org/wiki/File:Mataro Model Maritime Museum Rotterdam - WLANL.jpg.



SoE5.9 Improving Ship Design (page 5 of 6)

Ship #5: The Carrack, 1480-1600



Citation: Drawing of the Sao Gabriel, by Visconde de Juromenha, ca. 1558, copying the drawing in Alvaro Velho, A Journal of the first voyage of Vasco da Gama, 1497-1499, photograph by Ekem, Wikipedia Commons, http://commons.wikimedia.org/wiki/File:SaoGabriel.png

This is a drawing of Vasco da Gama's largest ship, the Sao Gabriel. It was a carrack. Carracks had 3 or 4 masts and lots of sails. Sailors call this a "full-rigged" ship. Because of the improvements in the rigging of the sails, the carrack could be much bigger than previous ships. With the Sao Gabriel and 3 other ships, Da Gama sailed from Portugal to India in 1497. He was the first explorer to sail around Africa into the Indian Ocean.



SoE5.9 Improving Ship Design (page 6 of 6)

Instructions: Now that you have described each of the 5 ships, you will compare and contrast the features of the ships. Using the handouts you have just read (pages 1-5), draw a circle around the features that are similar on all the ships. Draw a square around features that are different on the ships. Then answer the questions:



Citation: The Ships of Columbus [Die Schiffe des Columbus], painting by Gustav Adolf Closs in 1892, from Die Stuttgarter Sonntagszeitung Über Land und Meer. Deutsche Illustrirte Zeitung, 1892, uploaded by Syrcro, Wikipedia Commons,

http://commons.wikimedia.org/wiki/File:Gustav_Adolf_Closs - Die Schiffe_des_Columbus - 1892.jpg. Closs painted this 400 years after Columbus's voyage and he did not draw the ships completely accurately.

- 1. What features of the ships changed the most between the 12th and 15th centuries (from Ship 1 to Ship 5)?
- 2. Why do you think ship builders and sailors made these changes (the different features)?
- 3. What advantages do you think the caravels, nãos, and carracks had for sailing in the Atlantic Ocean?



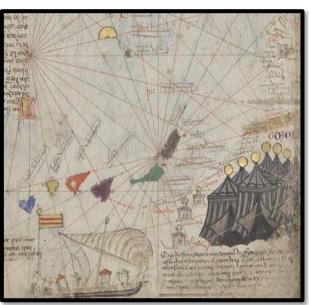
SoE5.10 Effects of Improved Naval Technology (page 1 of 2)

Teacher Instructions: Use these visuals and notes to lead a discussion or use it as a handout for students.

Focus Question: What were the effects of the improved naval technology? What did Iberian people do with these powerful ships?



1270: Venetians, Genoese and Catalans opened a sea trade route from the Mediterranean to Bruges. This replaced an overland route. Shipping by sea was much cheaper than shipping by land. This increased **trade** between the Mediterranean and northern Europe.

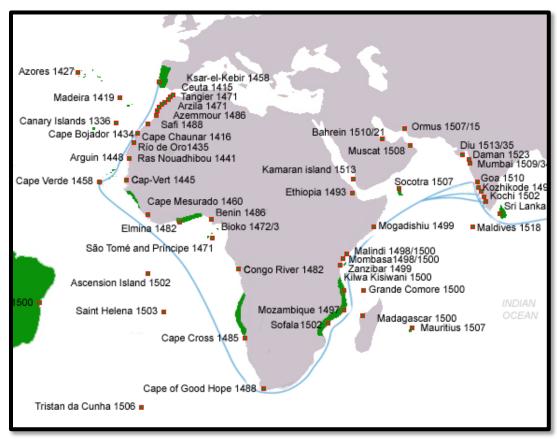


See citations on pages 8 and 25.

1340: Iberians sailed to the eastern Atlantic Islands – the Canary Islands, the Azores and others. Iberian explorers sailing out into the Mediterranean to the south went first to the Canary Islands, where they found native people living a stone-age lifestyle. Majorcan missionaries tried to **convert** the Canarians to Christianity. Later Castile conquered the islands and sent Castilian people to **colonize** it. Iberian merchants used the Canary Islands as a base for the **slave** trade. Many Canarians were sold as slaves, and the others died out. In the late 15th century, Iberian merchants set up **plantations** to grow **sugar** using slave labor. What happened in the Canary Islands was a blueprint for Iberian actions in the New World in the next century. On this panel of the Catalan Atlas, the Canary Islands are in brown, green, purple, red, etc. just above the ship.



SoE5.10 Effects of Improved Naval Technology (page 2 of 2)



Citation: Portuguese discoveries, exploration, contacts and conquests, created by Uxbona, 2007, modified 2011, Wikipedia Commons,

http://commons.wikimedia.org/wiki/File:Portuguese discoveries and explorationsV2en.png.

1440: The Portuguese sailed down the west coast of Africa looking for gold, slaves and a passage to the Indian Ocean (for spices.) This was an effort of many Portuguese ships, each one going just a little further down the coast than the previous explorer had. The effort was financed by the Portuguese government. First the Portuguese were trying to find a direct route to the gold fields of West Africa, so that they could take over the **gold trade** from the Maghribis. Then the Portuguese were looking for slaves that they could sell in Europe and North Africa. Finally, they were looking for a way into the **Indian Ocean**. The trade in **spices** and other goods from Asia was controlled by the Mamluk Sultanate, Venice and Genoa. The Portuguese wanted to get into this trade because it was so profitable. On the map, the red squares represent the date of the first Portuguese voyage to The green-colored areas were Portuguese colonies. The blue line represents the Portuguese trade routes in the 16th century.

1492: Christopher Columbus sailed west across the Atlantic looking for a route to the "Indies," the **spice** islands of Southeast Asia. By mistake, he found the **Caribbean islands** and the Americas.



SoE5.11 Investigative Reporting on Intolerance (page 1 of 9)

Group Assignment

Your group will be acting as if you are investigative reporters (for the TV news or a cell phone I-Report). Your assignment is to report on the event described in your assigned primary source.

- 1. Read the primary source and discuss the Questions for Consideration.
- 2. Plan your investigative report. Here are some options:
 - a. One student can be the reporter and another student(s) can play the author of the primary source or the people mentioned in the text.
 - b. One student can be the reporter, and others can be eyewitnesses to the event. (Make up names for them.)
 - c. Everyone in the group can be eyewitnesses to the event and describe what they saw, using the information from the primary source.

Write down your plan and who will be responsible for each part below.

- 3. The report can be videotaped, recorded on a cell phone, tablet or laptop, or acted out live in front of the class.
- A. Describe your group's plan:
- B. Outline below what actions you will each take:

Action	Student Responsible	



SoE5.11 Investigative Reporting on Intolerance (page 2 of 9)

Group 1 Primary Source

Al-Idrisi, Description of Almería, 1154

Introduction: Almería was a port city of al-Andalus and was ruled by the Muslim Almoravids in the 1100s. In 1147, Castile, with the help of Barcelona, Genoa and Pisa, captured it. The Italian cities were interested in Almería because of its excellent location for shipping and trade. Ten years later, in 1157, Almería was taken by the Almohads and remained in Muslim hands until the end of the fifteenth century. The author of this description of Almería was the geographer al-Idrisi, who also created the maps for King Roger of Sicily. You studied these maps in lesson 1 on Sicily. Al-Idrisi was a Muslim, born in the Maghrib in 1100, and educated in al-Andalus.

During the Almoravid period, Almería was an Islamic town in which there were all kinds of industry and wonderful things, including eight hundred workshops for silk manufacture. . . . [I]t was a large city visited by many merchants and travelers. Its inhabitants were prosperous, and there were no people in all of al-Andalus who were more civilized. There were 970 funduqs where duties on wine were taken, and as we have already mentioned, there were a large number of workshops for silk.

At the current time, when I am writing my book, Almería has fallen into the hands of the Christians [Rum]. Its beauties have been ravaged, its people have been taken as captives, its houses have been destroyed, its lofty buildings have been demolished, and

Vocabulary

prosperous = making good money

duties on wine were taken = taxes on wine were collected

ravaged = damaged badly

lofty = tall, beautiful

demolished = destroyed

Citation: Al-Idrisi, "Description of Almería,", translated by Olivia Remie Constable, in Medieval Iberia: Readings from Christian, Muslim, and Jewish Sources, Olivia Remie Constable, ed., 2nd ed. (Philadelphia, University of Pennsylvania Press, 2012).

Questions for Consideration

nothing remains of it.

- 1. What was al-Idrisi's perspective? (What were his gender, religion, ethnic group or state, occupation?)
- 2. According to al-Idrisi, what were the effects of the Christian (Castile, Barcelona, Pisa and Genoa) conquest of Almería?
- 3. What was al-Idrisi perspective on Christians? (Remember that he also worked for a Christian king, Roger of Sicily.)
- 4. Does this primary source show tolerance between religious groups? How?
- 5. Does this primary source show intolerance between religious groups? How? (Remember that sources can show both tolerance and intolerance.)



SoE5.11 Investigative Reporting on Intolerance (page 3 of 9)

Group 2 Primary Source

Benjamin of Tudela, Description of Barcelona and its Commerce, 1159-1172



Citation: Weltkarte des Idrisi vom Jahr 1154 n. Ch., Charta Rogeriana / wiederhergestellt und herausgegeben von Konrad Miller, Courtesy of the Library of Congress,

http://hdl.loc.gov/loc.gmd/g3200.ct001903.

Vocabulary

congregation = Jewish community

sages = rabbis (Jewish religious leaders)

illustrious = famous

R. = Rabbi

thither = to here (Barcelona)

from all quarters = from all over the world

merchandise = goods

Introduction: Benjamin of Tudela was a Jew from al-Andalus. He traveled around the Mediterranean and western Asia between 1159 and 1172. As he traveled, he kept a diary which is an important source for historians, because he recorded details about the Jewish communities in each place and economic activities of all cultural groups. Little more is known about him. At the time that Benjamin of Tudela visited Barcelona, it was ruled by Aragon, a Latin Christian kingdom.

[In Barcelona] there is a holy [Jewish] **congregation**, including **sages**, wise and **illustrious** men, such as **R.** Shesheth, **R.** Shealtiel, **R.** Solomon, and **R.** Abraham, son of Chisdai. This is a small city and beautiful, lying upon the sea-coast. Merchants come **thither from all quarters** with their **merchandise**: from Greece, Pisa, Genoa, Sicily, Alexandria in Egypt, Palestine, Africa and all its coasts.

Citation: Benjamin of Tudela, The Travels of Benjamin of Tudela, 1172, Internet Sacred Text Archive, http://www.sacred-texts.com/jud/mhl/mhl20.htm.

- 1. What was Benjamin of Tudela's perspective? (What were his gender, religion, ethnic group or state, occupation?)
- 2. What did he see in Barcelona? Did he seem to like the city?
- 3. What was Benjamin of Tudela's perspective on Christians and Muslims?
- 4. Does this primary source show tolerance between religious groups? How?
- 5. Does this primary source show intolerance between religious groups? How? (Remember that sources can show both tolerance and intolerance.)



SoE5.11 Investigative Reporting on Intolerance (page 4 of 9)

Group 3 Primary Source

A Business Partnership between a Jew and Christian in Barcelona, 1235

Introduction: This source is a business contract between Berenguer Bailiff, a Christian, and Solomon ben Saltell, a Jew. The contract was a legal document recording a business deal in Barcelona. Both men swore that they were going to be partners in running the mills and that Solomon would have ¼ of the profits for 2 years. The only way to tell the religion of the men is by their names. Berenguer and Guillem (William) were Christian names and Solomon was a Jewish name. Also using "ben," or "b.," meaning "the son of," was a Jewish naming custom. There are many other business contracts of partnerships between Christians and Jews in Iberian archives, or libraries where historical documents are kept.

I, Berenguer Bailiff, **concede** to you, Solomon b. Saltell **and yours**, that you have a quarter share of that purchase of the mills of Barcelona . . . for a period of two years; I promise to give you the share which you are owed of whatever profit God will give those mills in those two years, up to one quarter. . . . And I offer all my property as **security** for it.

To this, I Solomon ben Saltell, agree and firmly promise you, Berenguer Bailiff and yours, to accomplish and fulfill in good faith that which is incumbent on me on account of that quarter share. And for this I give you as guarantor my brother Astrug Saltell . . . with all our possessions which we may have or shall acquire.

Citation: Arxiu Capitular de Barcelona 1-6-483, translated by Elka Klein, Internet Medieval Sourcebook, edited by Paul Halsall, 1999,

http://www.fordham.edu/halsall/source/1242barcelonabusagreement.asp.

Vocabulary

concede = swear

and yours = and your heirs (family)

security = insurance; he would lose
his property if he broke the deal

to accomplish and fulfill in good faith that which is incumbent on me = to do what I promised to do

quarantor = co-signer

with all our possessions = insurance; the brothers would lose all their possessions if Solomon broke the deal

acquire = buy in the future

- 1. What was Berenguer Bailiff's perspective? (What were his gender, religion, ethnic group or state, occupation?)
- 2. What was Solomon ben Saltill's perspective? (What were his gender, religion, ethnic group or state, occupation?)
- 3. What did the two men agree to do?
- 4. What kind of trust do you think these men had for each other?
- 5. Does this primary source show tolerance between religious groups? How?
- 6. Does this primary source show intolerance between religious groups? How? (Remember that sources can show both tolerance and intolerance.)



SoE5.11 Investigative Reporting on Intolerance (page 5 of 9)

Group 4 Primary Source

Ramon Llull, On Preaching and Conversion, 1232-1236

Introduction: Ramon Llull (around 1232-1315) was born on Majorca to a Latin Christian Catalan family. He was a writer, philosopher and mathematician. He was also very interested in spreading Christianity and supporting the mission of the Franciscan friars, clergymen who worked as preachers and missionaries. (Much later in the 1700s

and 1800s, Franciscan friars built the missions in California to **convert** the Native Americans to Christianity.) This source comes from Llull's novel, Blanquerna. In it, he described a utopia, or how he thought the world should be. Llull believed that the best way to **convert** Muslims and Jews to Christianity was to learn their languages and then argue with them and preach to them until they **converted**.

The Pope . . . , to honor the glory of God, **ordained** that friars should be assigned to teach **diverse** languages to all monks that studied there [at a language school in Rome], and that throughout the world there should be built **diverse** houses, . . . [like] the monastery of Miramar, which is in the Island of Majorca. The Pope sent messengers throughout all the lands of **unbelievers** to bring back some of them to teach their language in Rome. Once these individuals learn **Latin** and the **Holy Catholic Faith** and successfully teach their languages to the friars, they shall accompany the friars to their homeland and help spread the Christian faith.

Vocabulary

conversion, convert = change
religion

ordained = ordered

diverse = different

unbelievers = Muslims, Jews, and other non-Christians

Latin = the Latin Christian church's language

Holy Catholic Faith = the beliefs of the Latin Christian or Roman church. The name "Roman Catholic Church" wasn't used until the Reformation, in the 1500s.

Citation: Ramon Llull, "On Preaching and Conversion," Blanquerna, translated by E. A. Peers, in Medieval Iberia: Readings from Christian, Muslim, and Jewish Sources, Olivia Remie Constable, ed., 2nd ed. (Philadelphia, University of Pennsylvania Press, 2012), 281.

- 1. What was Ramon Llull's perspective? (What were his gender, religion, ethnic group or state, occupation?)
- 2. What did Ramon Llull think Muslims and Jews should do?
- 3. If many Christian friars were going through Iberia preaching that unbelievers should convert to Christianity and arguing with Muslims and Jews in their own languages, what effect would that have on the Muslim and Jewish communities?
- 4. Does this primary source show tolerance between religious groups? How?
- 5. Does this primary source show intolerance between religious groups? How? (Remember that sources can show both tolerance and intolerance.)



SoE5.11 Investigative Reporting on Intolerance (page 6 of 9)

Group 5 Primary Source

Ordinance of the Jews of the Crown of Aragon, 1354

Introduction: In 1354, the leaders of Jewish communities in different towns in Aragon met together to find solutions to the problems Jews were having with Christians. This source is a modern translator's paraphrase of the original Hebrew text rather than a direct translation. The leaders were not able to get the king or the pope to order any of these laws.

The people of Israel have come into hard times. . . . Already there were cases of murder and riot here and there, and **no effective** protest had been raised. . . . They were to try to obtain from the King . . . that he should **intercede** with "the King of Nations, the Pope," . . . so that he might grant the Jews the following:

- a. A **decree** forbidding the masses of Christians to attack the Jews whenever a natural disaster, such as a **plague** or famine, occurs. . . .
- b. A law . . forbidding the Christians to make attacks on the Jews. . . [and stopping talk of miracles that] **incite** the mob to violence. . . .

Vocabulary

the people of Israel = the Jews

no effective protest has been raised = Jewish people may have protested the murders and riots, but no Christians paid attention

intercede = ask the Pope to do this favor for him

grant = give, in this case, make a law

decree = law

plague = this meeting was held 6 years after the Black Plague first struck Iberia. Some Christians blamed Jews for the plague, and attacked and killed lots of Jews in Iberia and elsewhere in Europe.

incite = encourage

Citation: Ordinance of the Jews of the Crown of Aragon, 1354 CE, translated and paraphrased by Louis Finkelstein, Jewish Self-government in the Middle Ages (New York: Jewish Theological Seminary of America, 1924), 336-347, Internet Medieval Sourcebook, edited by Paul Halsall, 1999, http://www.fordham.edu/halsall/source/1354ordinance-aragon-jews.asp.

- 1. What was the Jewish leaders' perspective? (What were their gender, religion, ethnic group or state, occupation?)
- 2. What trouble had happened to Jews in Iberia?
- 3. Whom did the Jewish leaders think could prevent future attacks?
- 4. Does this primary source show tolerance between religious groups? How?
- 5. Does this primary source show intolerance between religious groups? How? (Remember that sources can show both tolerance and intolerance.)



SoE5.11 Investigative Reporting on Intolerance (page 7 of 9)

Group 6 Primary Source

The Capitulations of Granada, 1491

Introduction: In 1491, Ferdinand and Isabella defeated Granada, the last small Muslim kingdom in Iberia. This legal document recorded the terms for the surrender of Granada to Aragon and Castile. It also stated how Muslim people in Granada would be treated in the future. In 1609, all Muslims were expelled from Spain.

- 1. Firstly that the **Moorish** king. . . [his officials] and all the common folk of the city of Granada . . . will in love, peace, goodwill, and with all truthfulness . . . surrender to **their highnesses** . . . along with the fortress of the **Alhambra and the Alhizan** with all towers and gates to the city.
- 2. Isabella, Ferdinand, and Prince Juan (their son) would after the surrender accept all Granadans, from King Abi Abdilehi (Boabdil) down, "great and small, men and women," as their... subjects.... [Nor] would they [the Granadans] have their estates and property nor any part **thereof** taken from them, rather they would be honored and respected by all...."
- 4. The **Moors** shall be judged in their laws and law suits according to the **code of the shari'a**, which it is their custom to respect, under the **jurisdiction of their judges and qadis**.

Vocabulary

Capitulations = surrender

Moorish, Moors = the Iberian Christian name for Iberian Muslims

their highnesses = King Ferdinand and Queen Isabella

Alhambra and the Alhizan = these were defensive forts of the city of Granada

thereof = of them

code of the shari'a = Muslim law based on the Quran

jurisdiction of their judges and qadis = this means that Muslims would be tried in Muslim courts by Muslim judges

Citation: The Capitulations of Granada, translated by L. P. Harvey, in Medieval Iberia: Readings from Christian, Muslim, and Jewish Sources, Olivia Remie Constable, ed., 2nd ed. (Philadelphia, University of Pennsylvania Press, 2012).

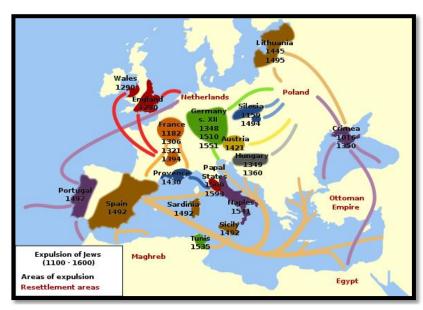
- 1. What was Ferdinand and Isabella's perspective? (What were their gender, religion, ethnic group or state, occupation?)
- 2. What was the Granadans' perspective? (What were their gender, religion, ethnic group or state, occupation?)
- 3. Does this primary source show tolerance between religious groups? How?
- 4. Does this primary source show intolerance between religious groups? How? (Remember that sources can show both tolerance and intolerance.)



SoE5.11 Investigative Reporting on Intolerance (page 8 of 9)

Group 7 Primary Source

Charter of Expulsion of the Jews, 1492



Citation: Map of the Expulsions of the Jews from European territories between 1100 and 1600 [Mapa de las expulsiones de los judios de territorios europeos entre 1100 y 1600], created by Ecelan, Wikipedia Commons, http://commons.wikimedia.org/wiki/File:Expulsion judios-en.sva.

Vocabulary

Christians = conversos, that is, Jews who had converted to Christianity

Judaized = practiced Jewish religious customs

apostatized from = rejected

Holy Catholic Faith = the beliefs of the Latin Christian or Roman church. The name "Roman Catholic Church" wasn't used until the Reformation, in the 1500s.

Inquisition = a Christian church court that investigated conversos. The Inquisition used torture and executed people found guilty by burning them at stake.

inquisitors = clergymen who worked for the Inquisition

Introduction: This document is the order by Ferdinand and Isabella that expelled, or kicked out, all the Jews from Spain. Before this order, Christians had been putting a lot of pressure on Jews to convert to Christianity. pressure was so great that many Jews converted to Christianity to save their lives and keep their property and businesses. These conversos (converted ones, in Spanish) often tried to keep practicing the Jewish religion secretly while they publicly went to Christian churches and acted like Christians. If they were caught by the Inquisition, they were tortured to make them confess their crimes (that is, practicing the Jewish religion) and accuse other conversos and Jews. Ferdinand and Isabella believed that Jews who had not converted to Christianity were pressuring conversos to return to Judaism. That was the main reason they gave in this document for expelling the Jews from Spain.

You well know . . . that in our kingdoms there were some wicked **Christians** who **Judaized** and **apostatized from** our **Holy Catholic Faith**. . . . [We] gave orders that **Inquisition** should be made . . . and by it many guilty persons have been discovered . . . and accordingly we were informed by the **inquisitors** . . . that great injury has resulted



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and still results, since the Christians have engaged in and continue to engage in social interaction and communication they have had and continue to have with Jews, who, it seems, seek always and by whatever means and ways they can to subvert and to steal faithful Christians from our holy Catholic faith

Citation: Charter of Expulsion of the Jews, 1492, translated by Edward Peters, in Medieval Iberia: Readings from Christian, Muslim, and Jewish Sources, Olivia Remie Constable, ed., 2nd ed. (Philadelphia, University of Pennsylvania Press, 2012).

have engaged in and continue to engage in social interaction = visit and talk to their Jewish family and friends

subvert = overthrow,
destroy

- 1. What was Ferdinand and Isabella's perspective? (What were their gender, religion, ethnic group or state, occupation?)
- 2. What was the conversos' perspective? (What were their gender, religion, ethnic group or state, occupation?)
- 3. Does this primary source show tolerance between religious groups? How?
- 4. Does this primary source show intolerance between religious groups? How? (Remember that sources can show both tolerance and intolerance.)



SoE5.12 Tolerance Reports

Instructions: As you watch the investigative reports from each of the groups, fill in the chart.

Group & Primary Source	Religions of People & Date	Does this report show tolerance or intolerance?	Evidence of Tolerance or Intolerance
Group 1, Al-Idrisi, Description of Almería			
Group 2, Benjamin of Tuleda, Description of Barcelona and its Commerce			
Group 3, A Business Partnership between a Jew and Christian in Barcelona			
Group 4, Ramon Llull, <i>On</i> Preaching and Conversion			
Group 5, Ordinance of the Jews of the Crown of Aragon			
Group 6, The Capitulations of Granada			
Group 7, Charter of Expulsion of the Jews			



SoE5.13 Majorca and Iberia Change over Time Chart Key

Directions for Teacher: Discuss the concept of change over time with students and then guide students through filling out this chart. An alternative strategy is to present the chart or the information in it to students. *Union is not official until later.

Categories	700-1050	1050-1300	1300-1500
Rulers of Majorca and	711-1002: Muslim Umayyad	1050-1212: Latin Christian kings of Aragon & Castile	Until 1492: Aragon, Castile & Portugal
Iberia (names, religions,	Caliphate ruled most of Iberia	gained more territory & Muslim states lost it	(Christian kingdoms) ruled most of
dates)	Small Latin Christian kingdoms in	1212- : Big victory for Aragon & Castile; they ruled	Iberia; Muslim Almohads ruled Granada
	north – Portugal, Castile, Aragon	most of Iberia; Muslim Almohads pushed down to	1492: Ferdinand & Isabella conquered
	1002: Umayyad Caliphate fell apart	Granada	Granada; Christians ruled all of Iberia;
	into smaller states	1229- : King James I of Aragon conquered Majorca	Union of Aragon & Castile into Spain*
Policy of rulers towards	Tolerance: Muslim & Christian	Tolerance but growing intolerance:	End to tolerance:
other religions. (Were	rulers were not always enemies	Christian rulers allow Muslims & Jews to practice their	Muslims leave Iberia or convert
they tolerant of other	Muslim rulers let Christians and	religions in separate communities, under separate law	1492: Jews expelled
religions? Explain.)	Jews practice their religions but	Christian rulers (and priests) spread crusading idea	
	they had to pay a tax		
Exchanges (What	Trade	Trade – gold, spices, Asian products	Persecution of Muslims & Jews
products, ideas, or	Translations from Arabic to Latin	Translations from Arabic to Latin	Borrowing ends; Christians now taking
technologies were		Borrowing Navigation Technology – astrolabes, maps,	over & moving to conquer other areas
exchanges between		ship> new creations	
people and societies?)		Christian kings use Jewish officials & learn from them	
		Business partnerships	
Effects of Exchanges	Coexistence under Muslim	Coexistence under Christian dominance	Christian dominance & intolerance
(How did these	dominance	Christians gain knowledge & ship technology	Christian Iberians no longer borrowing
exchanges affect	Christians gain knowledge from	Making new technology – portolan charts, Catalan	ideas & technologies, now they were
relations between	Muslim world	Atlas, better ships	taking over & getting rid of Muslims &
religious groups? How		Allows Catalans to break into gold trade & make more	Jews (competition)
did they affect economic		profits	Sailing down and around Africa
activity and international		Sailing into Atlantic Ocean	Voyages of Exploration
exploration?)			