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ANDALUSIA

HISTORY
GEOGRAPHY
CONTRIBUTIONS

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THE HISTORY OF ANDALUSIA IS UNIQUE

IN NO OTHER EUROPEAN COUNTRY WAS THERE

~ 800 YEARS OF ARAB/ISLAMIC OCCUPATION

&

CONTRIBUTIONS TO CIVILIZATION
(Science, Philosophy, Medicine, Architecture)

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HISTORY OF ANDALUSIA^{1,10} (+ contemporary scholars)

ANCIENT 9th cent. BC - 6th cent. AD
Phoenician, Greek, Carthaginian, Roman, Vandal, **Gothic**

MIDDLE AGES 8th - 15th cent. AD **ARAB/ISLAMIC**
711-756 - Umayyad Emirate Dependent On Damascus
756-929 - Umayyad Emirate Independent of Baghdad
929 - A/Rahman III declares himself a caliph
929-1031- Umayyad Caliphate, Independent
(+ Alhambra & Giralda)

1031-1091- The Taifa Kingdoms
1095-1147 - Almoravids (Murabits) (+Avenzoar "Ibn Zuhri")
1147-1236 - Almohad (Munwahids) (+Averroes "Ibn Rushd")

1232-1492 - Granada



* Power-Point presentation Dec. 4, 06, Dept. of Anesth., AUBMC, Beirut, Lebanon.

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ARAB / ISLAMIC CONQUEST OF ANDALUS¹¹⁻¹³

ARAB/ISLAMIC CONQUESTS - NORTH AFRICA

The Damascus Umayyad Campaign

• Early 8th cent. Musa ibn Nusair completed control of N. Africa (except Ceuta, ruled by Byzantine Julian). Tarek bin Ziyad (Governor of Tangier)



¹⁰ IN THE MEAN TIME

• Gothic King Roderick of Baetica (Andalusia) had usurped throne from legal owner. He was also enemy of Julian

• Family of lawful owner appealed to Julian to help them regain power

• Julian contacted Tarek who after consultation with Musa ibn Nusair and Damascus, received approval for a cautious reconnaissance



INITIAL RECONNAISSANCE OF ANDALUS (BAETICA)

• July 10, 710 – Tarif bin Malek Al Maafari, sailed from Ceuta to Tar (hence name of city) assisted by Julian. Returns with favourable reconnaissance reports.

¹¹ THE ARAB/ISLAMIC (MOORISH) CAMPAIGN AGAINST BAETICA (ANDALUS)

April 30, 711 – Tarek bin Ziyad, from Ceuta, crossed the straight and landed on Jebel Tarek (hence name Gibraltar)

• Famous statement”
 ايها الناس، أين الحفر، البهر من وراءكم، والعنوا أممكم، وليس لكم إلا الصدق والصبر

July 19, 711- Tarek defeated and killed Roderick at Battle of Gaudetele (وادي الكه). The Goths withdrew to northwestern mts.

Tarek continued occupation and inaugurated the ~ 800 yrs Arab/Islamic (Moorish) period of history of Spain (ANDALUS)

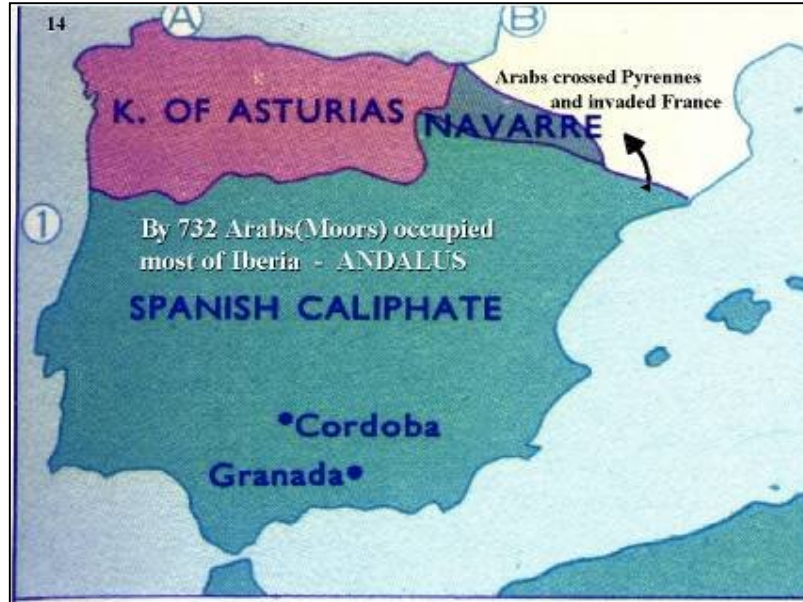
¹²

• VISIGOTHIC NOBLES REGROUPED IN NORTHWESTERN MOUNTAINS - ASTURIA

• BUILT DEFENSES AND OFFERED RESISTANCE

• THIS REGION BECAME THE FOCUS OF CHRISTIAN RECONQUEST “RECONQUISTA”

• EVENTUALLY REGION EXPANDED INTO THE KINGDOMS OF CASTILE LEON & ARAGON



732 – BATTLE OF POITIERS¹⁴

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معركة بواتييه
أوبراط أشهداء
١١٤م - ٧٣٢م
A/Rahman Gafki

هسلاطيتا
732 Arab (Moors) invaded western & central France

هذه هي المعركة التي دارت في اواسط فرنسا عند نهر التوار، في العام ٧٣٢م (١١٤هـ) بين جيش المسلمين بقيادة عبد الرحمن الغافقي وجيش الفرنجة بقيادة شارل Martel وانتهت بانتحاب جيش المسلمين. فتكثرت خلافة العارن، والحر محاولة لحمل رسالة الاسلام الى الامم الاوروبية.

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Charles Martel
Poitiers
Albanic
A/Rahman Gafki

العرب المسلمون في بلاد قنابل - فرنسا
الفرانجيون بقيادة شارل Martel
الغافقيون بقيادة عبد الرحمن الغافقي

Campaign thrust towards plane of Poitiers - Tours

17

Frankish
Charles Martel
A/Rahman Gafki

Oct. 11, 732 - Battle of Poitiers-Tours.
Arabs (Moors) lost battle. Withdrew back to Andalus

A decisive junctional battle
Changed the course of history.....

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K. OF ASTURIAS
NAVARRRE¹⁰
ANDALUS
SPANISH CALIPHATE
Cordoba
Granada

Arabs (Moors) returned to govern ANDALUS
711-756 Ummayed Emirate dependant on DAMASCUS

Creation of a new world state, religion, language and culture

THE GOLDEN AGE OF ANDALUS¹⁻⁹

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THE GOLDEN AGE OF ISLAMIC ANDALUS

929 – A/Rahman III declared himself a Caliph. Andalus as a major independent Moslem power

929 – 1031 UMMAYYAD CALIPHATE, INDEPENDENT
929-961 – A/RAHMAN III
961-976 – AL – HAKAM II

- BOTH WERE PATRIOTS OF LEARNING & ART
- THEIR PERIOD MARKS THE HEIGHT OF MOSLEM RULE IN THE WEST

THE DAWN OF THE MOST ADVANCED CIVILIZATION IN THE MIDDLE AGES

MOSLEM, CHRISTIANS & JEWS LIVED HARMONIOUSLY

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A/RAHMAN III
(929 – 961)

929 DECLARED HIMSELF CALIPH, INDEPENDENT OF BAGHDAD

- HIS COURT BECAME MOST GLORIOUS - RECEIVED ENVOYS FROM BYZANTIUM, FRANCE, GERMANY, ITALY
- BEGINNING OF CORDOBA'S ERA OF MAXIMUM POLITICAL, ECONOMIC & CULTURAL HEGMONY
- CORDOBA BECAME THE LARGEST, WEALTHIEST, MOST CIVILIZED & CULTURED CITY
- HE STARTED THE CORDOBA MOSQUE
- BUILT "MEDINAT AL ZAHRA (WIFE'S NAME), NOW IN RUINS"

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AL-HAKAM II
(961-976)

- A PATRIOT OF LEARNING
 - Established free schools
 - Founded the first univ. in Andalusia (Cordova)
 - Invited professors from the East and set aside endowments for their salaries
 - Attracted Christian & Moslem student from Europe, Africa and Asia
 - Promoted school of philosophy and medicine
- ESTABLISHED CITY LIBRARY (250,000 VOLUMES)
 - Greek texts introduced into Europe
 - Translation of Aristotle, Euclid, Hippocrates, Plato, Ptolemy
- EXPANDED GREAT MOSQUE, CONSTRUCTED MIHRAB
- ARABIC NUMERALS INTRODUCED

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HISTORICAL & CULTURAL TOUR OF ANDALUS

GIBRALTAR
MADRID
(1083)

TOLEDO
(1085)

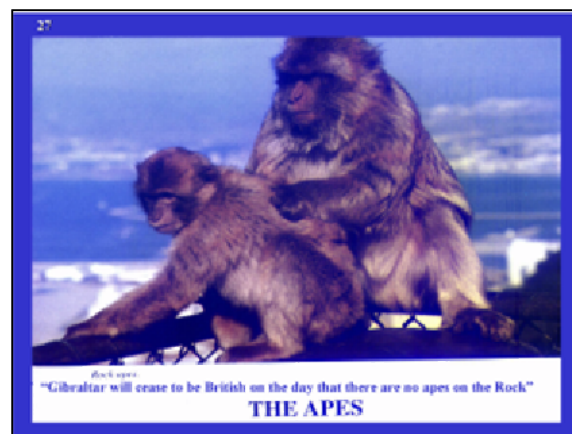
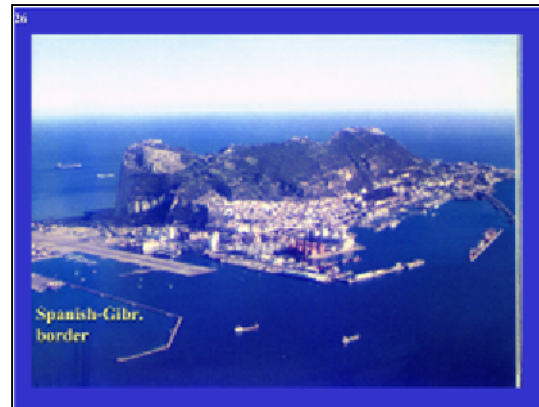
CORDOBA
(1236)

SEVILLE
(1248)

GRANADA
(1492)

(Order & dates of loss)

GIBRALTAR (Jebel Tarek)



MADRID



TOLEDO⁷

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TOLEDO

711 – Occupied by Musa bin Nusair
“Toletola”

1085 – Taken back by Alfonso VI
of Castile.

Expanding “Reconquista”



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- Toledo became the greatest Maslem learning center. Attracted prominent scholars to study Islamic medicine, civilization and art:
 - Adelard of Bath (Englishman), Petrus Alfonsi (Spanish Jew)
 - Michael Scot (Scotland), Gerard of Cremona (Italian)
- Toledo became famous because of its School of Translation
- By 13th cent., under influence of Alfonso X El-Sabio (The Wise), it became a cultural forum within which Christians, Moslems and Jews lived together in mutual tolerance and collaborated in a School of Translators, responsible for introducing Greek and Arab science and philosophy into the European Renaissance
- Toledo became the intellectual door thru which a storehouse of knowledge would become known to the West

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SOME PROMINENT SCHOLARS WHO WERE IN TOLEDO

- **Adelard of Bath** – Englishman. Philosopher and mathematician. First prominent European man to arrive
- **Petrus Alfonsi** – (Spanish Jew, converted). Became physician to Henry I & spread science of Moslems. Transl. Arabic astronomical & math. works to Latin
- **Michael Scot**, wrote about the transmission of scientific culture from Toledo to Bologna via the Court of Frederick II Hohenstaufen
- **Gerard of Cremona**, the greatest translator

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THE SCHOOL OF TRANSLATION OF TOLEDO^{15,16,17} "Escuela de Tradutores de Toledo "

• FOLLOWING THE FALL OF TOLEDO , ARCHBISHOP RAYMOND IN THE 12TH CENT, FOUNDED A SCHOOL OF TRANSLATION WHICH FLOURISHED UNTIL 13TH CENT.

THE TRANSLATING GIANTS:

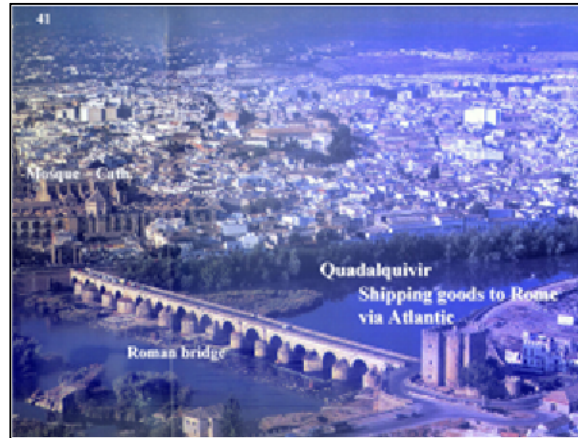
- **GERARD OF CREMONA** – Translated > 70 Arabic books
 - Almagest of Ptolemy : the main aim of his trip from Cremona
 - The Canon of Avicenna
 - Almansori of Al-Razi - al-manazir of Ibn Alhaitham
 - Al-Tasrif of Al-Zahrawi - astronomical
- **MICHAEL SCOT JOHN OF SEVILLE ADELARD OF BATH**

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GERARD OF CREMONA¹⁷

(1114 – 1187)

- The greatest and most prolific translator of his times >70 works in science. He produced first rate transl. directly from Arabic
- His transl. began to be used as textbooks in the new univ(s). founded in Europe & influenced countless generations
- Rise of universities paralleled Gerard's era of translation activity –Bologna (1150), Paris (1200), Salerno (1250)
- The impact of his work made on prominent thinkers of Europe:
 - Roger Bacon: relied heavily on Arabic thought
 - Albertus Magnus: indebted to Avicenna and Galen
 - Thomas Aquinas :brought Aristotle into church
 - Copernicus: knew of Gerard's transl. of Ptolemy's Almagest

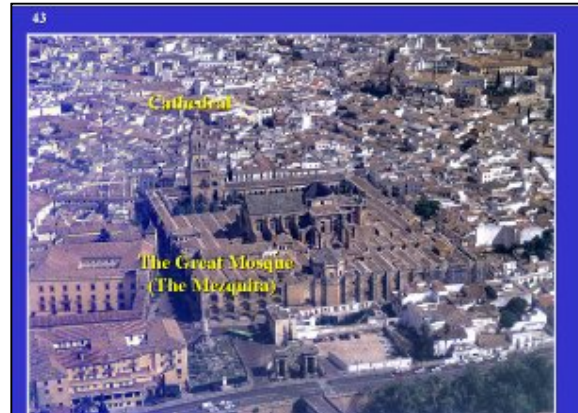
CORDOBA⁷

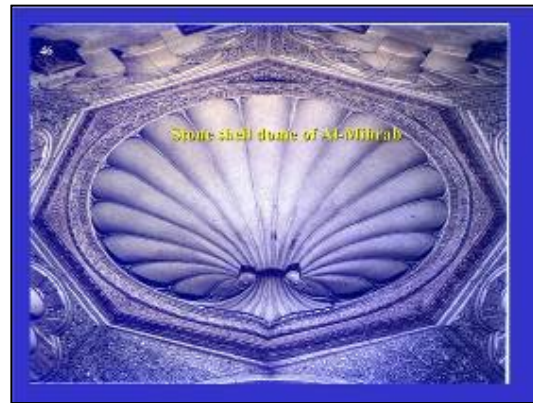
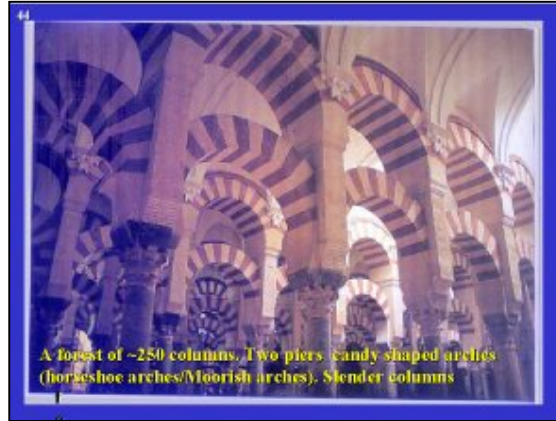
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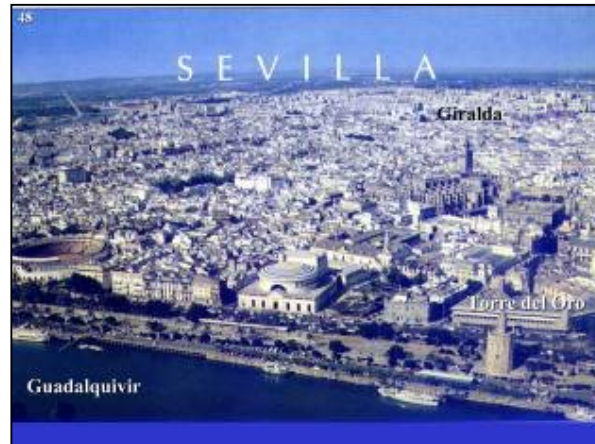
CORDOBA'S GOLDEN AGE (929-1031)
A/RAHMAN III & AL-HAKAM II

- Cordoba capital of powerful Caliphate. A glorious era, one of the most dazzling and greatest cities the world had ever known at the time
- Located at highest navigable point of the Guadalquivir. Port of great importance.
- Habitat to famous scholars: Abulcasis, Avenzoar, Averroes, & Maimonids
- Home of the Great Mosque (Mezquita) + Cathedral
- Famed for its cohabitation of Moslems, Christians & Jews
1236 - Cordoba conquered by Ferdinand III of Castile & Leon

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SEVILLE⁷

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SEVILLE
712 – Occupied by Arabs(Moors) ("Ishbillia)

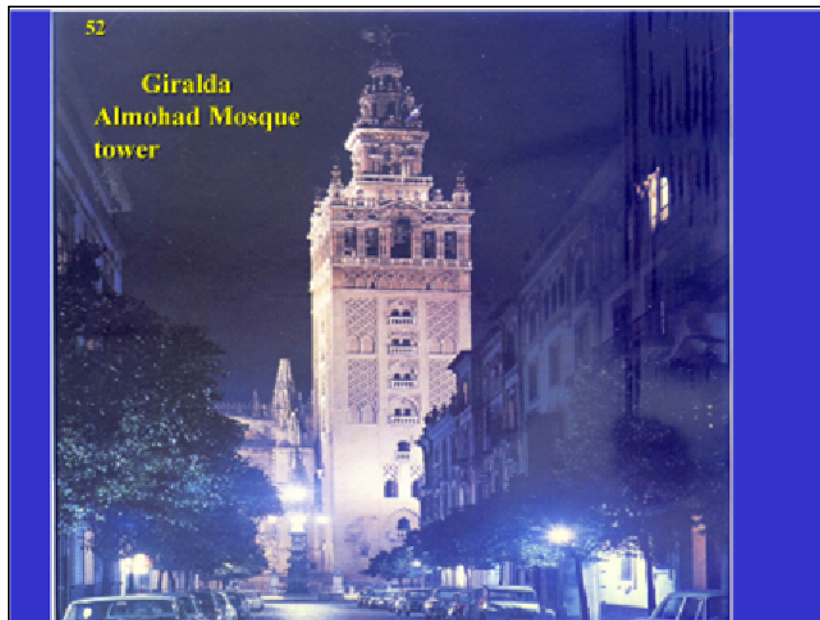
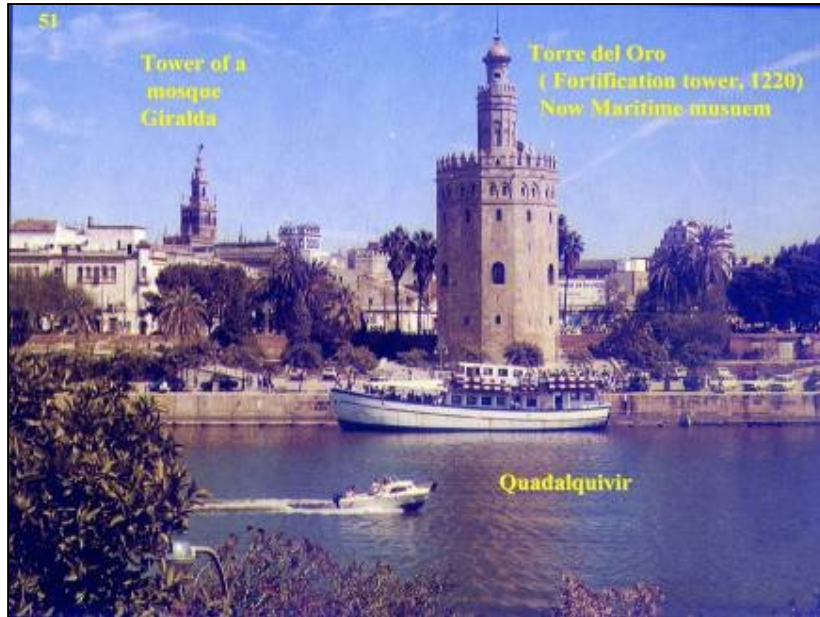
- Present Andalusian capital Beautiful & Romantic
- Straddles Guadalquivir river –A water highway.
- Prospered at Almohad Period (1147-1236)
Built Giralda, an Islamic monument

1248- Seville surrenders to Ferdinand III of Castile

1519 -Magellan set sail from Seville to circumnavigate the globe .

50 EL-CID (Campeador) 1040-1099 السيد

- Arabic- al-sayyid
- Spanish – campeador (champion, Spanish hero)
- Name- Rodrigo Diaz de Bivar
- A Castilian nobleman. Became mercenary captain fighting mainly for the Moors



MOSLEM SCHOLARS IN ANDALUS

Cent.	NAME	KNOWN AS	BORN	BOOKS	KNOWN AS
7th					
8th					
9th					
10th	936-1013 Abulcasis Al-Zahrawi Caliph.	Abulcasis	Zahra	التصريف لمن عجز عن التأليف Al-Tasrif	30 sections, last de Latin & Hebrew, the foundation of Salerno, Montpellier
11th	1091-1162 Almoravids	Avenzoar	Seville	التيسير في العلاج Al-Taysir	Facilitation of Treat. Descr. middle ear dis. The most illu. Phys. & philosoph. His phisio
12th	1126-1198 Almohad	Averroes	Cordova	التفهيم Colliget	Recommended to Phys., Philo., phil. Phys. After Galen
13th	1135-1204 1236-Cordoba fell	Maimonides			
14th	1332-1406		Tunis		al-Mukaddimah

ABULKASSEM AL-ZAHRAWI (Abulcasis, Albucasis)

Moslem Scholars in Andalus
Abulcasis Al-Zahrawi 936 – 1013 A.D (6,19,36,37) (Caliphate)
 (Albucasis) أبو القاسم خلف بن عباس الزهراوي

- Born in Zahra, near Cordova Caliphate period
- Court physician of the Umayyad caliphate at its height.
- Greatest surgeon medieval Islam produced.
- Wrote "Al-Tasrif" (التأليف) (التصريف لمن عجز عن التأليف) in 30 sections, the last deals with surgery:
 - Contained many illustrations of surgical instruments, most of his own inventions.
 - Laid the foundations of surgery in Europe. Guy de Chauliac, (the greatest of medieval surgeon), quoted it 200 times.
 - Translated into Latin 1497. Used for many centuries as manual of surgery in Salerno and Montpellier.

Abulcasis Al-Zahrawi In "Al-Tasrif"

For tracheostomy, he stated
 ("..... it is stated that tracheostomy was performed in former times, but I have never seen it done in our country- and I only state what they say.....")
 Described how tracheostomy should be done.
 "Incising the trachea under the 3rd ring...when trachea is opened, surgeon will notice that phlegm comes out and the voice is lost."
 "if the patient's pharynx is blocked by any of the tumors and is threatened to die from dyspnea, then tracheostomy should be performed to make patient breath through the wound and escape from death..."



IBN ZUHR (Avenzoar)¹⁸

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Moslem Scholars in Andalus

Abulcasis Al-Zahrawi 936 – 1013 A.D. (6,19,36,37) (Caliphate)
(Albucasis) **ابو القاسم خلف بن عباس الزهراوي**

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Ibn Zuhr (Avenzoar) *Al-Taisir*

- Wrote *"Al-Taisir fi al mudawat wa at-tadbir"*
- (التيسير في المعالجة والتدبير)
- (practical manual of treatment and diets).

"*Al-Taisir*" is the basis of Avenzoar's renown in the west. Was used as a textbook of medicine in European universities all the way through the 18Th cent.



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Ibn Zuhr (Avenzoar)

In "*Al-Taisir*"

- Ibn Zuhr was primarily a master of medical treatment. Was never known as a surgeon, but discussed several interesting surgical diseases
- Performed tracheotomy on a goat and subsequently on observing how the tracheal wound healed
- Described mediastinal tumors (and is said to have died in one), pericarditis, scabies and causative agent

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Ibn Zuhr (Avenzoar)

Greatest surgical contributions include new modalities of treatment and therapy

- Use of diamond point for breaking urethral stone
- Use of silk in the suture of abdominal and intestinal injuries
- Advocated special feeding tube in paralysis of deglutition
- Use of cotton in the management of fractures of the nose and vaginal prolapse
- Described new surgical operations such as bowel resection and tracheotomy (on goat)

IBN RUSHD (Averroes)¹⁸

⁶⁵ **AVERROES (IBN RUSHD) (1126 – 1198)**
Almohad Period


PHILOSOPHER & PHYSICIAN

Greatly admired Aristotle:

- Coerced by his Almohad patron to simplify Arist.
- Wrote 38 commentaries (long, medium, short)
- “Commentator”, Michel Scot transl. into Latin
- Caused revival of Aristotelianism in the West (vs Platonism).

In the issue of : Philosophy (reason) vs. Religion (faith)
 -He believed that truth must be approached by rational analysis (Aristotle). Contradicted by Al-Ghazali (Plato). Resp. “تهافت التهافت”

- Attempted to harmonize religion with phil. This gave impetus to develop. of rationalism in Christian Europe and emancipation from thoughts of Plato



⁶⁶ **Ibn Rushd (Averroes) THE PHYSICIAN**
Transl. Latin. A highly estimated book in Middle Ages

In the *Colliget*

- Anatomy of the respiratory system : trachea (semicircular cartilagenous rings), bronchi, bronchioles, opening into a number of infundibulea. Added the uvula.
- The lung is described as the chief respiratory organ with phases of inspiration and expiration.
- Voice evolves from the larynx
- Lung diseases:
 - Pleura may be affected by tumors (i.e. abscesses), giving stabbing radiating pain , acute fever and cough
 - Gave signs of pleurisy :pain expectoration and fever
 - Inflammatory swellings may attack the mediastinum

⁶⁷ **THE PHILOSOPHER ARISTOTELIAN “COMMENTATOR”**



ARISTOTELIS
 DE ANIMA
 STAGIRITAE
 COMMENTARIUS
 AVERROIS
 TRANSLATUS A MICHEL SCOTO
 IN LATEINAM
 LINGUAM
 AVERROIS
 TRANSLATUS A MICHEL SCOTO
 IN LATEINAM
 LINGUAM