

### ***The Dark Ages...How Dark Were They Really Crash Course Script:***

Right, so what you will quickly find is that your worst year was someone else's best year. So, too, with history. The period between 600 and 1450 CE is often called the Middle Ages in Europe because it came between the Roman Empire — assuming you forget the Byzantines — and the beginning of the Modern Age. And it's sometimes called the Dark Ages, because it was purportedly unenlightened.

But was the age really so dark? Depends on what you find depressing. If you like cities and great poetry, then the Dark Ages were indeed pretty dark in Europe. But if like me your two favorite things are not dying from wars and not dying from anything else, then the Dark Ages actually weren't that bad — at least until the plague came in the 14th century. And meanwhile, outside of Europe, the Dark Ages were truly an Age of Enlightenment. But we'll get boring Europe out of the way first. Let's go to the Thought Bubble.

Medieval Europe had less trade, fewer cities, and less cultural output than the original Roman Empire. London and Paris were fetid firetraps with none of the planning of sewage management of places 5,000 years older like Mohenjo-daro in the Indus Valley Civilization, let alone Rome.

But with fewer powerful governments, wars were at least smaller, which is one reason why Europeans living in Medieval Times — *Ugh Thought Bubble, I knew you were going to do that*. Anyway, people in medieval times lived slightly longer — life expectancy was 30 — than Europeans during the Roman Empire — when life expectancy was 28.

Instead of centralized governments, Europe in the middle ages had feudalism, a political system based on reciprocal relationships between lords, who owned lots of land, and vassals, who protected the land and got to dress up as knights in exchange for pledging loyalty to the lords. The lords were also vassals to more important lords, with the most important of all being the king. Below the knights were peasants who did the actual work on the land in exchange for protection from bandits and other threats.

Feudalism was also an economic system, with the peasants working the land and keeping some of their production to feed themselves while giving the rest to the landowner whose land they worked. The small scale, local nature of the feudal system was perfect for a time and place where the threats to peoples' safety were also small scale and local. But of course, this system reinforces the status quo - there's little freedom and absolutely no social mobility. Peasants could never work their way up to lords, and they almost never left their villages. Thanks, Thought Bubble.

One more point that's really interesting from a world history perspective: this devolution from empire to localism has happened in lots of places at lots of different times. And in times of extreme political stress, like after the fall of the Han dynasty in China, power tends to flow into the hands of local lords who can protect the peasants better than the state can. We hear about this a lot in Chinese history and also in contemporary Afghanistan, but instead of being called feudal lords, these landlords are called warlords. Eurocentrism striking again.

The other reason the Dark Ages are called "dark" is because Europe was dominated by superstition and by boring religious debates about like how many angels can fit on the head of a pin. And while there's something to that, the Middle Ages also saw theologians like Thomas Aquinas, who was quite an important philosopher, and women like Hildegard of Bingen, who wrote all this important liturgical music and also basically invented the genre of the morality play.

All that noted, things were certainly brighter in the Islamic world, or Dar al Islam. So when we last left the Muslims, they had expanded out of their homeland in Arabia and conquered the rich Egyptian provinces of the Byzantines and the entire Sassanian empire, all in the space of about 100 years.

The Umayyad Dynasty then expanded the empire west to Spain and moved the capital to Damascus, because it was closer to the action, empire-wise but still technically in Arabia. That was really important to the Umayyad's because they'd established this hierarchy in the empire with Arabs like themselves at the top and in fact they tried to keep Arabs from fraternizing with non-Arab Muslims throughout the Empire. This of course annoyed the non-Arab Muslims, who were like, "I don't know if you're reading the same Quran we are, but this one says that we're all supposed to be equal." And pretty quickly the majority of Muslims weren't Arabs, which made it pretty easy for them to overthrow the Umayyad's, which they did in 750 CE.

Their replacements, the Abb(ah)sids, Abb(uh)sids? Hold On...

Computer: Abb(ah)sids or Abb(uh)sids

John: D'ahh, I'm right twice! Right, so the Abbasids were from the Abb(ah)si or the Abb(uh)si family which hailed from the Eastern, and therefore more Persian, provinces of the Islamic Empire. The Abbasids took over in 750 and no one could fully defeat them – until 1258, when they were conquered by – wait for it – the Mongols.

The Abbasids kept the idea of a hereditary monarchy, but they moved the capital of the empire to Baghdad, and they were much more welcoming of other non-Arab Muslims into positions of power. And under the Abbasids, the Dar al Islam took on a distinctly Persian cast that it never really lost. The Caliph now styled himself as a king of kings, just like the Achaemenids had, and pretty soon the caliph's rule was a lot more indirect, just like the original Persians'. This meant that his control was much weaker, and by about 1000CE , the Islamic Caliphate which looks so incredibly impressive on a map had really descended into a series of smaller kingdoms, each paying lip-service to the caliph in Baghdad. This was partly because the Islamic Empire relied more and more on soldiers from the frontier, in this case Turks, and also slaves pressed into military service, in order to be the backbone of their army, a strategy that has been tried over and over again and has worked exactly zero times. Which you should remember if you ever become an emperor. Actually our resident historian points out that that strategy has worked-- if you are the Mongols.

More important than the Persian-style monarchy that the Abbasids set up was their openness to foreigners and their ideas. That tolerance and curiosity ushered in a golden age of Islamic learning centered in Baghdad. The Abbasids oversaw an effervescence of culture unlike anything that had been seen since Hellenistic times.

Arabic replaced Greek not only as the language of commerce and religion, but also of culture. Philosophy, medicine, and poetry were all written in Arabic (although Persian remained an important literary language). And Baghdad became the world's center of scholarship with its House of Wisdom and immense library.

Muslim scholars translated the works of the Greek Philosophers including Aristotle and Plato as well as scientific works by Hippocrates, Archimedes and especially the physician Galen. And they translated and preserved Buddhist and Hindu manuscripts that might have otherwise been lost.

Muslims made huge strides in medicine as well. One Muslim scholar, ibn Sīnā, wrote the Canon of Medicine, which became the standard medical textbook or centuries in both Europe and the Middle East. And the Islamic empire adopted mathematical concepts from India such as the zero, a number so fascinating and beautiful that we could write an entire episode about it but instead I'm just gonna write it a little love poem:

Oh, zero. Pretty little zero. They say you're nothing but you mean everything to mathematical history ...and me.

Oh, it's time for the Open Letter? An Open Letter to science and religion.

But first lets see what's in the Secret Compartment. Oh, champagne poppers? Stan, what am I supposed to do with these?

Dear Science and Religion,

You're supposed to be so irreconcilable and everything, but not so much in the Abbasid Empire. I mean, Muslim mathematicians expanded math to such a degree that we now call the base ten number system and the symbols we use to denote it "Arabic numerals". And religion was at least part of what pushed all that learning forward. Like the great philosopher Ibn Rushd argued that the only path to religious enlightenment was through Aristotelian reasoning. And Muslim mathematicians and astronomers developed algebra partly so they could simplify Islamic inheritance law. Plus they made important strides in trigonometry to help that people understand where to turn when trying to turn toward Mecca.

You were working so well together, science and religion, but then like Al and Tipper Gore, just couldn't last forever. Nothing gold can stay in this world, nothing gold can stay.

Best wishes, John Green

Baghdad wasn't the only center of learning in the Islamic world. In Spain, Islamic Cordoba became a center for the arts, especially architecture. This is perhaps best exemplified by the Great Mosque at Cordoba, built by the Umayyad ruler Abd al-Rahman I In 785-786 CE. That's right, this building, still standing today and one of the most amazing mosques in the world, was built in a year, whereas medieval cathedrals took, like, a million years to finish.

The Muslims of Spain were also engineers who rivaled the Romans. Aqueducts in

Cordoba brought drinkable water into the city, and Muslim scholars took the lead in agricultural science, improving yields on all kinds of new crops, allowing Spanish lives to be longer and less hungry.

Everybody wanted to live in Spain, even the greatest Jewish philosopher, Maimonides, wanted to live in Spain, but sadly he was expelled and ended up in Alexandria, Egypt. There he wrote his awesomely titled defense of rationality, *A Guide for the Perplexed*. I'm translating the title, of course, because the original text was written ...in Arabic.