

Chapter 3: Climate shifts during the Dark Ages and Medieval Warm Period

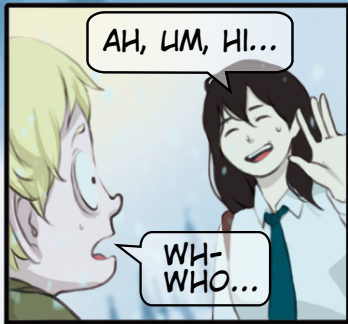
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WHOA!



WHERE AM I NOW?
OH, IT'S SNOWING? AND,
IS THAT A VILLAGE?

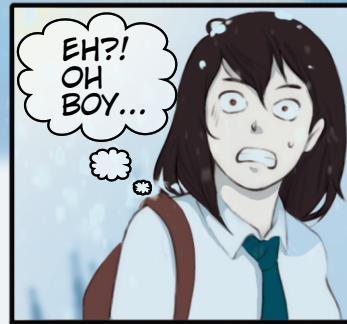


AH, UM, HI...

WH-WHO...



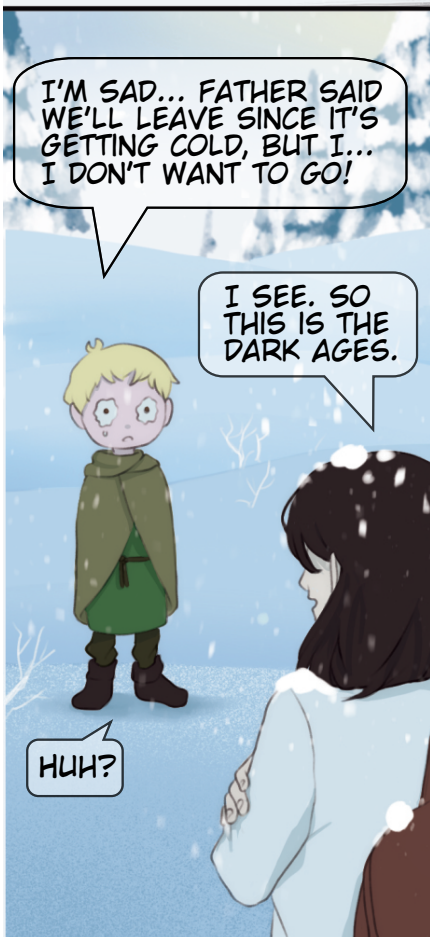
WHO ARE YOU?!



EH?!
OH BOY...



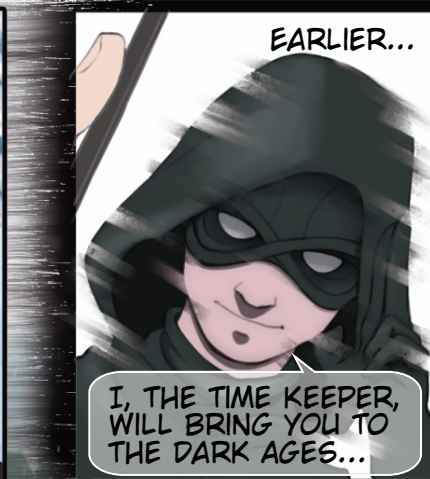
WHERE TO START...



I'M SAD... FATHER SAID WE'LL LEAVE SINCE IT'S GETTING COLD, BUT I... I DON'T WANT TO GO!

I SEE. SO THIS IS THE DARK AGES.

HUH?



EARLIER...

I, THE TIME KEEPER, WILL BRING YOU TO THE DARK AGES...

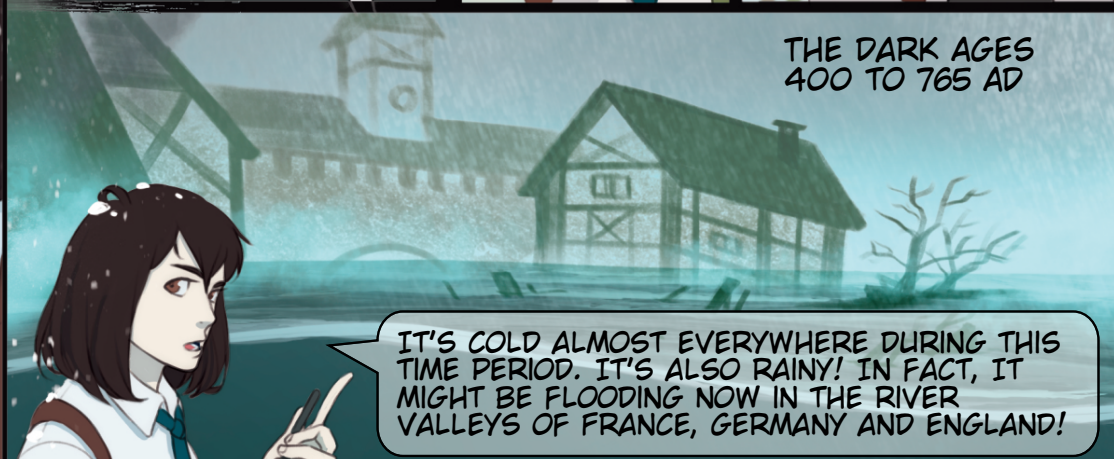


...YOU WILL TELL A TALE OF CLIMATE CHANGE TO A LOCAL...



I'LL TELL YOU EVERYTHING I KNOW...

...SINCE YOU WILL BE MY MESSENGER.



THE DARK AGES
400 TO 765 AD

IT'S COLD ALMOST EVERYWHERE DURING THIS TIME PERIOD. IT'S ALSO RAINY! IN FACT, IT MIGHT BE FLOODING NOW IN THE RIVER VALLEYS OF FRANCE, GERMANY AND ENGLAND!

ALTHOUGH IT IS COLD AND RAINY IN EUROPE...

IT'S COLD AND DRY IN SOME PARTS OF CHINA. DROUGHTS MAY BE OCCURRING THERE...

IT'S GETTING REALLY COLD HERE, SO THAT'S WHY YOU NEED TO LEAVE.

AH, BUT...

I DON'T WANT TO.

BUT! YOU! NEED! TO!

YOU SEE, CLIMATE CHANGED, IS CHANGING, AND WILL CONTINUE TO CHANGE. IT'S NOT JUST HERE. NOW, IT LOOKS LIKE WE WILL EXPERIENCE AN EXTREME CLIMATE SHIFT. AFTER THE DARK AGES...

MEDIEVAL WARM PERIOD
800 TO 1300

...COMES THE MEDIEVAL WARM PERIOD. THIS TIME WILL BE RAINY AND WARM IN NORTHWEST EUROPE. RINGS IN THE TRUNK OF TREES ARE OUR CLUES! IN MOST CASES, THE LARGER THE RING, THE WARMER AND WETTER THE CLIMATE IS.

OOH! CAN WE CUT A TREE AND LOOK AT THE RINGS? I WANT TO SEE THE RINGS!

WAIT A MINUTE! SOME RINGS ARE TOO SMALL, AND WE CAN'T CUT A TREE ANYWAY! GOING BACK...

...IT WILL ALSO BE QUITE WARM IN THE EASTERN AND SOUTHERN TIPS OF GREENLAND. SINCE IT'S WARM, VIKING PEOPLE COULD CHOOSE TO FISH IN THE SEA INSTEAD OF EATING FARM ANIMALS.

REALLY?! I LOVE SEAFOOD!

SPEAKING OF THE SEA, IS THAT A SHIP? IS THAT YOUR FAMILY THERE?

YES! FATHER SAID THAT WE CAN'T GROW FOOD HERE BECAUSE IT IS TOO COLD NOW, SO WE WILL SAIL AND LOOK FOR ANOTHER PLACE TO CALL HOME...



OH, THE SHIP! THAT MEANS I HAVE TO GO BACK!

WAIT! BEFORE YOU GO...



REMEMBER THAT THE CLIMATE CAN CHANGE FROM ONE STATE TO ANOTHER. IT MIGHT BE COLD NOW, BUT CLIMATE MAY BECOME WARMER IN THE FUTURE.

...LIKE HOW A SHIP ROCKS AT SEA TO KEEP ITSELF STEADY, THE CLIMATE ALSO TRIES TO BALANCE ITSELF. EARTH'S CLIMATE WENT FROM WARM TO COLD TO WARM AGAIN... MANY, MANY TIMES IN THE PAST.

THIS IS WHY WE NEED TO LEARN ABOUT THE CLIMATE OF THE PAST, SO THAT WE CAN PREDICT WHAT THE FUTURE HAS IN STORE FOR US.



THANK YOU SO MUCH! I WON'T LET THIS BOTHER ME ANYMORE! THIS IS FOR YOU!



...NO WORRIES!



H-HEY, WAIT! NO, NOT YET!



YOU... TAKE ME BACK TO THE PAST, RIGHT NOW!



THE PAST, YOU SAY? BUT, I'M BORED OF IT ALREADY...

HEY... WANT TO SEE WHAT YOUR FUTURE MIGHT LOOK LIKE?



...TO BE CONTINUED!