

THE GIANT WIDENS HIS WORLD

*The Middle Ages
and
The Renaissance*

BY M. ILIN AND E. SEGAL

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INTERNATIONAL PUBLISHERS, NEW YORK

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BY THE SAME AUTHORS

Giant at the Crossroads: The Story of Ancient Civilization

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CHAPTER ONE

1. The Last Romans

Italy was devastated. Many cities were in ruins. Others had disappeared completely. It was as if they had been wiped off the face of the earth. You might think that the elements themselves had risen in rebellion against man. Surely, only an earthquake or a flood could have caused such devastation, where only recently there had been a flourishing country.

The uncultivated fields were completely covered with weeds. The neglected vineyards had become a wilderness. The earth did not want to be an empty desert. It began to cover up its wounds in its own fashion.

The villas of Roman senators lay in ruins. From the fragments of pink and white marble, from shattered columns, barbaric newcomers built their villages and erected fortresses. With their axes, they ranged through the cypress groves, chopping down trees and burning the logs in the fireplaces of their smoky huts.

In the streets of the villages, the children of the Goths played with pieces of broken statues. Mothers wrapped their newborn babies in bits of Roman togas and tunics.

On a neighboring estate a new master, a member of the retinue of the Gothic king, was established. The king had been very generous in allotting this foreign land. But although Goths now ruled over Italy, the slaves' lot was not

one whit improved by this change of masters. The slaves were the very ones who had welcomed the Goths, who had thrown open the gates of Rome to them. But now these new masters put them back at the plow and the hoe.

Here and there, a few Roman landowners survived. They lived—or more correctly outlived their era—as best they could, trying somehow to adapt themselves to the new, terrifying, and puzzling way of life. Every year they went to Ravenna, to the treasury of the Gothic king, to pay their tribute—one-third of their entire income—grateful that not everything was taken away from them.

The new capital, Ravenna, was very different from the former one, Rome. It towered like a fortress in the forests of northern Italy. Crosses had long since been set atop the ancient pagan temples. Altars had been established in the old courts of justice where once judges had presided. Theodoric, King of the Goths, now called himself “Augustus”; and when ambassadors were to be received, he donned a mantle of purple and placed a gleaming diadem upon his head.

But how unlike the former Augustus he was! He could neither read nor write Latin, could not even sign his name to edicts and decrees. When he had to send a message to a neighboring king—of Burgundy or of the Franks—he had to summon his secretary and adviser, Cassiodorus. Cassiodorus had been a distinguished Roman, a senator. But he came obediently at the summons, with a wax tablet in his hands, and like a secretary, took notes from his master. Cassiodorus did not lose hope that he could teach these barbarians something. He knew they could not get along without science.

Government was still a novelty for this new “Augustus,” this barbarian leader. Without Roman advisers and officials he could not possibly establish order, could not cope with the complicated business of government. The Goths depended

entirely on force. They said that the business of a warrior was to know how to handle a sword, not a pen. But how can one manage the affairs of a government without knowing how to read, without the pen? Cassiodorus, armed with a pen, respectfully gave advice to his master, the king, who listened like a pupil to a teacher.

Theodoric had a daughter, Amalsuntha. She understood better than her father how useful learning was. She took to books eagerly, learned the language of science and culture. In a few years she was translating Virgil from Latin to Greek. Her son, Athalaric, was heir to the throne of her father. She sat him down to a primer, although it was forbidden by law to teach Gothic children to read.

Upon hearing of these lessons, some of the oldest and bravest courtiers went to the king and indignantly demanded that he put a stop to it. They said it was a bad example for other children. What an idea for the king to break one of his own laws! A man did not have to know how to read in order to become a brave warrior. Besides, if he had been frightened even once by a teacher's whip, he would never stand up to a sharp word.

Cassiodorus listened in silence to the speeches of the courtiers. He showed no sign of emotion, although in his heart he despised these barbarians.

What was their past? They had been savage and ignorant.

It was not so long since Tacitus had described how German children grew up naked and dirty together with the pigs and the cattle. Caesar had reported how robbery, instead of being a disgrace, was looked upon as a means of training young people. And Cassiodorus also remembered Pliny's story of a German tribe, which until very recent times lived on the shore of a northern sea, built their houses on piles, and knew nothing at all of agriculture.

Theodoric ordered Cassiodorus to write a history of the Goths. This was hard to do, for their history lay in the future. Still Cassiodorus had faith in the power of culture and believed it would finally triumph over barbarism. . . .

In addition to Cassiodorus, Theodoric had another counselor, Boethius. He, too, was a Roman of high birth. He loved science. Books had the most honorable place in his home. In his leisure time he studied the laws of musical harmony. To learn the relationship between numbers and sound, he fastened strings to a plank, then shortened or lengthened them, and listened to the sound grow higher or lower in the scale. He wrote a book about music which survived for centuries.

Boethius was also interested in mechanics and made a clock for Theodoric, which not only told the time but also showed the movements of the heavenly bodies. His neighbor, the king of Burgundy, heard about this water and sun clock and sent Theodoric a request for one for himself. Boethius set to work on it, and the ambassadors of King Theodoric took the wonderful present to Lyons.

Theodoric felt very favorably inclined toward Boethius. At his request Cassiodorus wrote a letter to Boethius:

"The *Astronomy* of Ptolemy and the *Geometry* of Euclid are now being read in your Latin translations. Plato, the student of the divine, Aristotle, the logician, now discourse in the language of Rome. Archimedes, the mechanic, was introduced by you in Latin. Whatever of science and art were given birth by the fertile Greeks, Rome has been able to absorb in its native language thanks to you."

When he read this letter Boethius thought: "I recognize the pen of Cassiodorus. But more than one century will have to pass before these Gothic barbarians learn to understand Aristotle and Ptolemy."

Boethius gave every minute to books. He did not want

to see or know what was going on in the world, what had become of the Eternal City, of the proud Roman Empire. Barbaric hordes flooded the country. Famine and plague followed in the footsteps of war to kill off those who had managed to survive. Roman senators forgot they were Romans and kowtowed to the barbarians, hoping to save a few of their possessions—as if they could stop a flood with friendly words. But the flood swallowed everything—not only the property and rights of the Romans, but their philosophy, their art, and their science.

But even now, perhaps it was not too late to stop them!

So Boethius opened negotiations with senators and wrote letters to Byzantium where Caesars still ruled the country. Maybe salvation would come from there, for the waves of the flood had not yet reached the eastern part of the Roman Empire. From Ravenna to Byzantium stretched the threads of the plot. But the secret was discovered; the conspiracy was disclosed.

Enraged, Theodoric ordered Boethius to jail. Behind the stone walls, expecting punishment by death, Boethius sought consolation in philosophy. He wrote a book which he called *The Consolation of Philosophy*. The heavy prison door was securely locked. The guards could not be bribed. No friends of Boethius were allowed to visit him. And did he have any friends on the outside?

Nevertheless, he was not alone. He had his books. He had the company of Socrates, who like himself had found consolation in philosophy when he was in prison. He had the companionship of other wise men among the ancients. But it was difficult to console a man who was doomed. Boethius was full of bitterness. He saw no light ahead. He felt that nothing was immortal. Everything passed. Everything turned to ashes in this world. Even the Eternal City could not stand before the destructive power of the times.

His pen flew over the pages. His head did not stop working.

But the executioner was already sharpening the ax which was to sever this thinking head from the body. Boethius, "the last of the Romans," died on the block.

And what became of Cassiodorus? Did he also die? Or was he not a Roman? Yes, he was a Roman; and no less than Boethius, he was devoted to ancient culture. But he had not taken part in the conspiracy. He had studied history too long and knew that it could not be halted in its course. But he too fought for culture, fought in his own way.

He retired to his estate in the south of Italy and built a monastery there—one of the first monasteries in the world. He called it "Vivarium," the haven of life. Here he hoped to preserve what little was left after the flood of barbarians. He said to his monks: "There is no higher calling than that of the recorder of history." From morning till night, his monks recorded the wisdom of Greece and Rome.

Years passed.

By the middle of the sixth century A.D. the kingdom of the Ostrogoths had long since disappeared. The Lombards ruled in Ravenna. In the south, life still went on as usual in the monastery of Vivarium. The quiet, persistent work did not stop for a single day. Like bees in a hive, the monks gathered the honey of ancient wisdom for coming generations. Cassiodorus, the spiritual father of the work, was by then a very old man, over ninety years old. But he did not have time to die. It seemed as if death itself hesitated to enter these cloisters and interrupt the work or stop the pens of the monks. Now and then Cassiodorus would glance up from his manuscript and look at the blue haze of the mountains in the distance. But he did not see those mountains; he saw rather the streets of Rome, his own youth, his friends. He

saw Boethius and remembered *The Consolation of Philosophy*.

Those who had sent Boethius to his death were long since dead. Theodoric slept in his tomb. His daughter, Amalsuntha, was also dead. The barbarians had put her to death because she did not want to be a barbarian.

The old Rome was no more. But the books had outlived Rome. Wisdom outlives the centuries. Cassiodorus was eager to preserve this wisdom as a heritage for future generations. He compiled an encyclopedia of literature and the arts. Seven free arts, seven sciences, Cassiodorus knew: grammar, rhetoric, dialectic, arithmetic, music, geometry, and astronomy. How could one cover them all in one book? His old hands trembled. His heart was tired. How much that heart had lived through in ninety hard years!

The old man felt he could not die yet; he had to finish his book. He must at least preserve the names of the ancient wise men so people would know where to find their treasures, where they were stored away.

At last the book was finished. Cassiodorus finally died at the age of one hundred. But others carried on his work. The backs of the chroniclers were still bent over the scrolls. What was there left for the friends of wisdom to do but record? The time for creating anything new had passed. It was necessary at least to preserve and hand on the old.

Every year, ignorance made the world darker and darker. Fewer and fewer people could read and write.

"The study of science is dying out with us," wrote Bishop Gregory of Tours to his friend, the poet Fortunatus.

Many monasteries were established. But what had been a sacred matter to Cassiodorus, the monks frequently regarded as a sin. The head of the church, the Roman pope, wrote to one of his bishops: "It seems that you are teaching grammar. I cannot repeat these words without blushing. I feel sad and

sigh every time I think of it. Do write me that you have given up studying this absurd, secular science, and we shall thank God for it."

Science was despised, exiled. There was no longer an Academy at Athens. The asylum of the last philosophers, it had survived for nine centuries; but the Byzantine emperor, Justinian, ordered the philosophers driven out. In Alexandria a mob burned the library of the Serapion, the temple of Serapis. They tore to pieces the daughter of the mathematician Theon, because she followed in her father's footsteps and studied geometry and astronomy.

Even in Athens and Alexandria there was no longer any place for science. So what could be its lot in foreign lands, in the wooded countries of Germany and Gaul? Ahead of it lay a difficult life, filled with humiliation and hardship. Only out of pity, as a scholarly handmaiden of theology, was it tolerated in monasteries. It became a Sleeping Beauty.

But centuries would pass and Sleeping Beauty's patience would be rewarded. A fairy prince would come at last and unlock those iron doors, lead her by the hand out of her dungeon, and make her a queen. What would this prince's name be? Roger Bacon, or Copernicus, or Leonardo da Vinci, or Giordano Bruno?

He who reads this story to the end will find out.

2. Science Becomes a Fugitive and Goes From Monastery to Monastery

Everything grew darker and darker. Even among the clergy it was hard to find anyone who could read and write. Only here and there were monasteries to be found, perched like lone rocks on the mountains. Behind their thick walls,

in the dim light that managed to get in through tiny little windows, industrious monks worked from morning till night, copying books.

When the hordes of barbarians overran the entire Empire, a stream of fugitives fled to its edges—to Britain and Ireland. Leaky old boats, tossed by the rough water of the English Channel, carried over loads of frightened women, crying children, and desperate, grim-faced men.

Behind them they left everything they were used to—their homes, their native soil, their slaves. They could take with them only their most precious belongings; and even so the overloaded boats could scarcely keep afloat.

Some brought silver and gold, others valuable furs and cloth. But there were some among them to whom a book was the most precious thing in the world. In their panic to get away, these people did not forget to grab up their favorite poets and philosophers. Nobody gave much thought to these works of the wise men of old. The books hid themselves modestly in the boats among the bales and the people. They patiently bided their time. And this time came. . . .

In one of the Irish monasteries a learned monk was recording ancient sagas which had been composed by pagan bards. But the learned monk was not a mere chronicler. When he recorded the voyages of the Irish seafarer, Maildun, he could not help but remember another sailor, Odysseus, who brought from the Mediterranean Sea to the Ocean both the Cyclopes and the beautiful Calypso. Into this old Irish saga he wove some of the words of the Psalms of David and of the poems of Virgil: *Forsitan et haec olim meminissi iuvabit*. ("Perhaps someday we shall enjoy remembering even this.") So at the very edge of the world, not far from the mythical land of Ultima Thule, was heard anew the voice of the Roman poet who had been forgotten in his own country.

Science, as well as poetry, found a haven in the monasteries of Ireland and Britain.

A scholar, the "Venerable" Bede, wrote textbooks for the monastery schools. In his own words he rewrote Boethius' book on music. Another scholar, the Briton Alcuin, studied arithmetic and music from Bede's books. And so, in this way, the light of knowledge passed from one to another, from Aristotle to Boethius, from Boethius to the Venerable Bede, and from Bede to Alcuin.

Alcuin, too, did not hide this light within himself but worked to pass it along to others. As Aristotle had been the instructor of Alexander, so Alcuin taught the sciences to Charlemagne.

Charles, King of the Franks, was a mighty and courageous warrior. He was so powerful that with one blow of his sword he could cut right through the helmet and skull of an enemy. But a pen was too light and small a thing for his tremendous hand. He did not know how to manage it. He kept a wax tablet and a sharp stylus under his pillow. When he could not sleep at night, he would get them out and painstakingly practice writing Latin letters. The breeze through the open window played with the flame from the oil lamp. His long beard touched the waxen tablet and got in the way of his writing. The letters came out shapeless and crooked. The bearded student was displeased. With the blunt end of the stylus he would cross out the lines he had written and begin all over.

Charlemagne tried his best, for he realized how important it was for the ruler of a great kingdom to know how to read and write. In a great state you cannot get along without scribes, chancelleries, decrees, laws, embassies; and Charlemagne's kingdom was big and growing all the time. How many countries and peoples he had subjugated with fire and sword!