

The Old Age of the World

A MILLENNIUM OF EMPIRE

On the 21st of April in AD 248, the city of Rome celebrated its 1000th birthday. For three days and three nights, the haze of burnt offerings and the sound of sacred hymns filled the streets. A veritable zoo, of the most extravagant creatures from around the world, was offered to the people, and massacred: thirty-two elephants, ten elk, ten tigers, sixty lions, thirty leopards, six hippopotami, ten giraffes, one rhinoceros (hard to come by, but incomparably fascinating), and countless other wild beasts, not to mention a thousand pairs of gladiators. These *ludi saeculares*, the traditional "century games" that Rome held to mark centennial anniversaries, summoned forth a host of archaic memories, "skilfully adapted to inspire the superstitious mind with deep and solemn reverence," in the words of Gibbon. The celebration still carried shadowy associations with the underworld and the diversion of pestilence. Despite the deliberate primitivism of the rites, the *ludi saeculares* could be credited, like so much else, as a creative rediscovery of the imperial founder, Augustus. The *ludi saeculares* were in every sense an imperial affair, a stage-crafted display of the awesome power that Rome enjoyed, uninterrupted for centuries on end. Little did contemporaries know they were witnessing a sort of valediction, the last secular games Rome would ever see.1

It is easy, at our distance, to imagine that there was some measure of denial in such an exuberant celebration of the Roman millennium—that the inhabitants of Rome were enjoying the ancient equivalent of cocktails on the deck of the Titanic. But we must not be blinded by hindsight. Rome in AD 248 offered much to inspire a sense of familiarity and confidence. Just a generation before, the "navel of the city," the *umbilicus urbis*, had been grandly refurbished, a monument affirming that Rome was the center of the world. The *pomerium*, the urban boundary, remained a construct of the imagination in an unwalled city that sprawled into its hilly countryside. The coins, including the very issues minted in AD 248 to honor the games, maintained their ponderous texture of true silver, so that to hold one of





Figure 4.1. Silver Coin (Antoninianus) of Emperor Philip Celebrating Millennium Games (American Numismatic Society)

them even today is to feel the combination of precious metal and public trust that steadied the value of the imperial money. We have a flavor of the confidently patriotic prayers whispered at the games: "For the security and eternity of the Empire, you should frequent, with all due worship and veneration of the immortal gods, the most sacred shrines for the rendering and giving of thanks, so that the immortal gods may pass on to future generations what our ancestors have built up." The secular games were an omnibus act of religious piety, mobilizing all of the city's most archaic reserves of cultic energy in an effusion of thanksgiving and supplication for the eternal empire.²

The emperor presiding over the spectacle on this occasion was Marcus Julius Philippus, or Philip the Arab. Hailing from the southern reaches of Syria, he was not a conspicuous outsider. The steady integration of the provinces had long since effaced the distinction between rulers and subjects. His reign began in a storm of confusion, amid a failed invasion of Rome's eastern neighbor that took the life of his predecessor; but Philip had skillfully extricated the Roman army, at a dear price, and headed for Rome, leaving the eastern provinces safely under the protectorate of his brother. Philip's reign started with an impressive show of energy: administrative reforms were attempted in Egypt, and a great burst of road improvements have been detected in places so removed as Mauretania and Britain. A satisfying victory was achieved against the northern barbarians, and, in AD 248, he was able to return to Rome to celebrate the millennial anniversary. As Philip clearly recognized, the City herself demanded obeisance as the focal point

of power, at the nexus of people, army, and senate. In Rome, still, campaigns were planned, careers plotted, fortunes decided.³

The Rome of Philip would have felt familiar to Augustus. And yet, just one generation on, we find ourselves in a truly alien world. The serene confidence of the empire had been rudely shaken. Hulking stone fortifications, the Aurelian Walls, went up round a city where distance and mystique had so recently seemed protection enough. The silver had vanished from coins that were now not much more than crude wafers, spewed in desperate superabundance from the mints. A truly new kind of man—the Danubian soldier with little time or awe for the *urbs* itself—had irreversibly wrested control of the state from the moneyed senatorial aristocracy. Careers were made and unmade in the barracks of northern garrison towns, rather than in the old capital. Beneath the imperial city itself, in the maze of burial caverns known as the catacombs, there is evidence that the obscure cult of Christianity was, for the first time, making uncanny strides toward becoming more than a marginal curiosity. In short, in the space of a single generation, the lineaments of an entirely new age, the period we now call late antiquity, had come into view.

This generation of headlong change is cloaked in obscurity. The murder of Philip in AD 249 touched off a spiral of dissolution that would engulf the entire imperial order. Historians know these times as the "crisis of the third century." The empire seemed to pass under a maleficent star. All at once, aggressive enemies on the eastern and northern frontiers pushed into the empire; the teetering dynastic system was exposed, while in quick succession one usurper after another spilled civil blood in pursuit of the crown. Fiscal crisis was the inevitable consequence of war and intrigue.

With the advantage of hindsight, historians have had no trouble finding the roots of this crisis. The collection of causes gives the crisis of the third century an air of inevitability; it seems overdetermined. The last thing we might seem to need is another cause to add to the crowded queue. But, to introduce environmental crisis into the story is only to be faithful to the insistent evidence for the agency of climate change and pandemic disease. It might also inject a healthful sense of the circumstantiality of the crisis, which was not just the inevitable release of long accumulated pressure. The concatenation of very specific and sudden blows to the Roman Empire in the 240s and 250s forced the system beyond the threshold of resilience. A withering drought and a pandemic disease event to rival the Antonine Plague lashed the empire with a force that was an order of magnitude greater than the combined menace of Gothic and Persian intrusions. The collapse of frontiers, dynasties, and fiscal order was as much the *consequence* as the cause of the crisis. The edifice

of empire buckled along the seams of structural fragility, but the blows from without provided the fresh destructive force.⁴

The language of "crisis" derives from Greek medical terminology. The crisis is the turning point of an acute illness, when the patient succumbs or recovers. It is an apt metaphor for the empire in the middle of the third century. It provokes us to remember that, by ca. AD 260, there was no guarantee of Rome's future. The frontier network had utterly failed; great chunks of the empire, both east and west, had cleaved themselves off under breakaway rulers; basic routines of governance vanished. The centrifugal force might well have prevailed.

Yet the patient recovered. Under the forceful leadership of a series of Danubian military officers, most of the empire was reassembled. But here the metaphor of crisis is stretched to its limits. The healed patient was not quite the same in the aftermath. The empire that reemerged was based on a new equilibrium, with new tensions and new harmonies of state and society. It required more than a generation of trial and learning to calibrate, but what emerged from the rubble of crisis has been rightly described as a "new empire." Whereas the Antonine crisis had sapped the empire's batteries of stored energy but left the foundations intact, the crisis of the third century was transformational. It should be called the first fall of the Roman Empire, and even in this dimly lit corner of the Roman past, we can see that the environment was a protagonist in turning imperial fortunes.⁵

If the purpose of the *ludi saeculares* was to invoke divine favor and ward off pestilence, the rites soon proved a stupendous failure. It was a point that was surely not lost on contemporaries.

THE LONG ANTONINE AGE: THE SEVERAN EMPIRE

The marriage of Marcus Aurelius and his wife Faustina was, even by Roman standards, prolific. But of their fourteen children, only one male descendant, Commodus, who had been placed under the medical supervision of Galen, survived his parents. He was enough. The lucky run of emperors without a male heir came to an end, and immediately the empire reverted to the biological principle of succession. The seventeenth emperor of Rome, Commodus was the first who had been born to the purple, reared from the cradle as the prince.

During his twelve years of rule, the empire found its footing after the trauma of war and pestilence. But Commodus lacked the civility of his

father, and relations with the senate turned from sour to deadly. In AD 190–91, epidemic disease returned to the city with a vengeance, in concert with a gripping food shortage that spread from Egypt to Rome. Recriminations flew. The senate blamed the malfeasance of the emperor's cronies. A conspiracy was cautiously hatched; under the emperor's nose, safe men were appointed to critical posts; on New Year's Eve of AD 192, Commodus was strangled in the palace. The dynasty was toppled.⁶

The eventual winner of the imperial sweepstakes was a middling senator of modest physical stature and unexceptional accomplishment named Septimius Severus. His was a very Roman story. He was born in the middle of the reign of Antoninus Pius, in AD 145, just a year after Aelius Aristides delivered his hymn to the greatness of Rome. His hometown was Lepcis Magna, a Punic town on the Mediterranean coast that was practically a model of Romanization. The first Latin inscription dates to 8 BC. A temple of the Punic deity Milk'ashtart was reconsecrated as a temple of "Roma and Augustus." The accouterments of a Greco-Roman town came quickly: amphitheater, porticos, baths, aqueduct, arches. In the later first century, Lepcis was granted the status of a municipium, a town whose elected magistrates automatically became Roman citizens. Under Trajan, Lepcis became a colonia, all its citizens now citizens of Rome. Even in a city that boasted tremendous olive oil wealth, the ancestors of Septimius Severus stood out, vaulting to the highest echelons of Roman society. They paved the way for Septimius to follow a senatorial career, serving the empire from Syria to Gaul. When the coup took down Commodus, Septimius had been posted as governor of the militarized province of Upper Pannonia. The situation in Rome spiraled out of control, and Septimius was hailed as emperor by his troops.⁷

Although he himself was a great believer in astrology, there was nothing particularly foreordained about his success. Yet Septimius Severus was to prove one of Rome's most influential dynastic builders.

The dynasty he built would endure for more than four decades. It is important to see it in the right profile. Septimius soon styled himself a son of the Antonine dynasty. While this was an audacious fiction, the advertisement of Antonine heritage aptly expressed the fact that his empire was more an extension of the previous age than a premonition of darker times over the horizon. Historians have lately cut the crisis of the third century down to size, to a delimited period stretching from the middle of the 240s to the middle of the 270s. The rehabilitation of the Severan dynasty is an inseparable adjunct of this shorter, sharper crisis. The negative judgment of the ancient historians contemporary with the dynasty long colored modern opinion. Cassius Dio considered the end of Marcus' reign the end of a

golden age and the beginning of an age of "iron and rust." But pessimism was absolutely *de rigueur* in Roman historiography (things were always getting worse), and Dio reflects the exquisite distaste of the senatorial order for the later representatives of the Severan dynasty, in which women played a prominent role. The deep veins of misogyny and strained relations between emperor and senate should not darken the achievements of a manifestly accomplished imperial dynasty.⁸

Septimius Severus was a wealthy senator from a coastal Mediterranean hub. He was not by any stretch an army man. His military credentials at the time of his accession were modest at best, far less impressive than other dynasty builders like Augustus, Vespasian, or Trajan. Septimius had to build his military resume on the go, washing away the distasteful memory of bitter civil war with a hasty but successful invasion of Parthia and a massive campaign to finish the conquest of northern Britain. Septimius had the army to thank for his power, and he harbored no illusions on this score. His advice to his sons, "get along, enrich the troops, and care little about everyone else," betrays his practical outlook. After the death of Commodus, the real "secret of the empire" had been revealed, that the army could be used as instrument of blunt force to seize the mantle of power. But, in the case of Septimius, the instrument was still wielded by a man of the senatorial order, a commander drawn from the ranks of the civilian class. And the commander, in line with the best of Roman traditions, would reward his loval base in turn.9

The triumph of Septimius was an undisguised boon for the provincials. The sons and grandsons of Roman colonists strewn around the western Mediterranean had risen inexorably from the later first century. But with the Severans, we observe the entry of a fully provincial elite into the senate and the palace. The wars under Marcus, in combination with the demographic upheaval of the pandemic, had accelerated the entry of talented provincials into the upper ranks of the imperial order. An entire brigade of talented and wealthy Africans "stormed the heights" under the Antonines. Septimius followed in their stead, and the dynasty he built unleashed the full potential of the provinces.¹⁰

Fittingly, when his first wife—an obscure, hometown girl—passed away, Septimius, then governing Gaul, proposed to a daughter of the Syrian aristocracy named Julia Domna. The offer of engagement traveled a mere 4400 kilometers from Lugdunum to Emesa! This match made of empire became the core of a Libyan-Syrian dynasty that brought a distinctive style and openness to imperial culture. Septimius oversaw the full integration of Egypt into the mainstream of imperial society—a proper town council for

Alexandria and the entry of Egyptians into the senate. Septimius was not abashed to show his Libyan origins, and it was a heyday for North Africa. Early in his life, Septimius had a dream in which he looked down from a mountain on the whole world and saw it singing in harmony. Septimius was an active dreamer, but this one captures something of what his dynasty accomplished.11

The crowning moment was left to his son, Caracalla. In AD 212, at a stroke, he granted citizenship to all free inhabitants of the empire. The "Antonine Constitution" erased the already tenuous distinction between imperial rulers and colonized subjects. Universal enfranchisement belatedly affirmed that the Roman Empire had become a territorial state. It was a watershed. Mere moments after its enactment, we happen to find the denizens of a remote village, tucked in the mountainous folds of southern Macedonia, trying to sort out what their new status meant for customary relations between patrons and their freed slaves. A little later, we find women on the fringes of the Syrian desert asserting their rights to property ownership ... by invoking the legislation of the emperor Augustus. Over the course of the third century, the diffusion of Roman law picked up pace as the new citizens learned to bend Roman law to their purposes. By the century's end, a traditional handbook for orators discouraged speakers from trying to flatter a city by praising its laws, "since the laws of the Romans are used by all." 12

Not by accident was the Severan period the apex of classical Roman law. The greater portion of Justinian's Digest is comprised of excerpts from Severan jurists. The most conservative of all intellectual disciplines found its finest exponents in a series of officials from the eastern edges of empire. The jurists Papinian and Ulpian were both Syrians, and both served the Severan administration in the highest capacities. The spread of citizenship was matched by a higher degree of professionalism in the practice of law, and in the case of Ulpian we can say that some of his greatest writing was called forth by the need to equip governors for the challenge of responding to the new citizens. The law school in Beirut was established, destined quickly to become the epicenter of legal life and learning. Nothing more eloquently testifies to the decentering of imperial culture in the Severan age than the provincial contribution to Roman jurisprudence.¹³

The talent of the provinces found an outlet in the growing ranks of the imperial administration. The early Roman Empire was characterized by a "deficit of officials"; the central administration was a wispy cover, tossed over the sturdy civic foundations of public life. The expansion of the central imperial offices was an inevitable and organic process that unfolded in tandem with Romanization and the diffusion of market-based institutions. Under the Severans, the pace quickened. The second aristocratic order, the equestrian, was energetically broadened; in the third century, there were still gentleman equestrians, but an increasing number of civil and military offices at the equestrian grade swelled the ranks of imperial knights. There is no need to see the senatorial and equestrian orders in conflict or tension in the Severan age. Throughout the reign of Septimius, senators "virtually monopolized the senior administrative posts and army commands." The Severan empire respectfully guarded the exalted place of the senate in running the empire, but the professional ranks of imperial service were now broader, and more representative of the vast territories under Roman rule.¹⁴

The most important political change in the age of the Severans was a subtle shift of power to the army. Augustus had successfully deweaponized the army as a political instrument, but the events that brought Septimius to the helm flashed its true potential. The consequences were felt in the purse. Early in his reign, Septimius gave the troops a 100 percent raise. The average legionary saw his pay increase from 300 to 600 *denarii* per year. The appreciation was long overdue. The soldiers had not seen a pay hike since AD 83–84, in the reign of Domitian. If the Egyptian evidence is broadly indicative, the years after the Antonine Plague had witnessed a doubling in nominal prices, so that the raise under Septimius was equivalent to a belated cost-of-living adjustment.¹⁵

But the raise may also signal something even more subtle and profound. The Roman state had always managed to field an army of nearly half a million men at arms with a light touch. The higher salary is only one sign that military recruitment was destined to become a more serious chore in the years to come. But it was not yet a crisis: Septimius succeeded in enrolling three new legions without manifest strain, and enlistment remained voluntary. Septimius did concede active-duty servicemen the right to marry, breaking a centuries-old tradition in which enforced bachelorhood was part and parcel of the discipline of a professional army. The right to marry was surely no small inducement to service, and it slowly changed the complexion of the military. In sum, Septimius' concessions to the troops were part power politics, part overdue adjustment, and part recruitment strategy.¹⁶

The fruits of Severan success were abundant. A bloom of cultural efflorescence, more inclusive than ever before, unfolded. The influx of provincial talent was a jolt to Severan culture. The ancient capital remained the focal point of imperial patronage. The building program of Septimius in Rome was ambitious, swaggering into dialogue with the constructions of the emperor Augustus. The arch of Septimius required rebuilding the *umbilicus urbis*, adjacent to the golden milestone of Augustus, where all roads

symbolically converged. The grand Temple of Peace, destroyed by a calamitous fire under Commodus (much to the regret of Galen, who lost writings and precious drugs in the disaster), was rebuilt with élan; giant columns of red Aswan granite imposed on the viewer from the outside, while inside the extraordinary marble map, known as the Forma Urbis Romae, spread some 60 × 40 feet, showing every corner of the city with the intention of overwhelming the eyes. Septimius erected the Septizodium, a massive façade honoring the seven planetary gods, where the Via Appia met the Palatine Hill in the heart of the city. Caracalla sponsored monumental baths, and the last of the Severans, Alexander, constructed the final aqueduct of Rome. Great watermills and giant granaries went up around the city.¹⁷

At the time no one knew they were enjoying the last great burst of monumental public building in the classical Mediterranean; it was followed by an abrupt hiatus, before the cycle of church construction in late antiquity resumed the spirit of monumentality in a new guise. The building boom is but one sign that the Severan period was an age of economic and demographic recovery.

It was during these decades that the sour churchman Tertullian could declare, "it is clear to behold that the world itself is more intensely cultivated and built up than in olden times. All places are now crossed by roads, all are known, all are open for business. The most pleasant estates have obliterated what were once notorious wastelands. The deep forest yields to the ploughed field. Wild beasts flee before our herds. The desert is sown, and rocky fields are planted. The marshes have been drained, and there are now more great cities than there were once mere houses. None now fear the lonely isle or dread their craggy shore. Everywhere there are houses, everywhere people, everywhere the city, everywhere life! And the greatest testimony of all is the abundance of the human race." We might doubt these rosy observations, if they had been offered in a spirit of flattery. Tertullian had graver purposes: the talented polemicist needed to find credible proof against the doctrine of the transmigration of souls, and the unprecedented number of humans walking the earth seemed a glaring obstacle to the doctrine's logic!18

The demographic recovery proceeded without the interruption of major epidemics. While the smallpox virus could have become endemic in the larger cities of the empire, there are no reports of the disease between the recurrence in Rome in AD 190-91 and scattered references in later centuries. The absence of evidence is never conclusive, but on balance the silence suggests that the pandemic burned itself out or hid in corners where its impact was limited. The retreat prepared the way for population rebound.

It has been the impression among papyrologists that the population of Egypt expanded again, though it never reached its pre-Antonine peaks. The village wasted by the pestilence, Soknopaiou Nesos, was clearly hanging on during the Severan period, and it is documented at least down to AD 239. The village of Karanis revived in the early third century and then virtually disappeared in the middle of the century, before another revival toward its end. Other cases follow the pattern. Oxyrhynchus, one of the best documented towns of Roman Egypt, is estimated to have been home to 11,901 souls in AD 199 and then to have grown to ca. 21,000 by AD 235: while the rate of growth implied by these numbers is too high, the direction of change is at least indicative. Broadly, the literary, papyri, and archaeological records agree that the Severan age was a period of demographic resurgence.¹⁹

Under the Severans the empire recovered its balance. If there was a corrosive agent in the new order, it was the brute revelation of the army's power. The genie could not be put back in the bottle. The son and successor of Septimius, Caracalla, after disposing of his brother, threw himself behind the soldiers. He increased the pay of the ordinary legionary by 50 percent again, to 900 *denarii* per year. While Septimius had debased the silver coinage early in his reign, the repercussions had been minimal. The fiscal exigencies, or sheer pride, of Caracalla required a more radical sleight of hand. He experimented with a new silver coin, the antoninianus, valued at two denarii but containing only 80 percent of the silver of two denarii. Yet the introduction of the new coin seems not to have provoked trouble. The state rigorously maintained that the public coinage embodied a face value established by fiat, not by the market value of the precious metal content. Remarkably, it worked. The denarii, with higher silver content, were not driven out of circulation, and there is no evidence for nominal inflation. The coinage was increasingly a fiduciary currency. Only with the benefit of hindsight does it seem that the Romans had built a pier, swaying out over the abyss.²⁰

With the exception of a brief interlude on the death of Caracalla, the Severan dynasty ruled until AD 235. Its last representative, Alexander Severus, was cut down by his own men on campaign along the Rhine. The claimant was a man named Maximinus. An equestrian from the military gentry of the lower Danube, he was the first true outsider to hold the imperial throne. Maximinus would be remembered as a savage. He seems to have malingered in the north on campaign, despite the fact that the senate had confirmed his rule. He sent dispatches of his victories to the capital but also installed paintings of his campaigns outside the senate house. Judging from the silver content of his coins, he was able to maintain, despite the expense of his military operations, the financial equilibrium of the later Severans.

But in his disregard for the power politics of Rome, he was too far ahead of his time.

In the spring of AD 238, his regime folded. It was a textbook legitimation crisis. The revolt started in distant North Africa, where the locals refused to bear the crushing fiscal expectations of his agents. A rather bungling senatorial coup still managed to topple his regime. The career of Maximinus shows that sometimes the first act of history is the farce. Maximinus was a harbinger, but the age of the barracks emperors was not yet at hand.²¹

THE OLD AGE OF THE WORLD: CLIMATE CHANGE IN THE THIRD CENTURY

It is irresistible, in retrospect, to see the career of Maximinus as a prelude. But that presumes too much about the next act. In AD 238, the senate resumed control of affairs, and soon the thirteen-year-old Gordian III was alone in power. He was capably advised by remnants of the Severan elite. He set off for the east to answer Persian aggression in northern Mesopotamia, and by AD 242, exactly eighty years after Lucius Verus, he arrived with a massive entourage at Antioch. Within two years, after a botched campaign, Gordian III was dead, deep behind enemy lines. Philip was hailed as emperor and hurriedly extricated the army, for an indemnity of 500,000 aurei (gold coins). The situation was not desperate. He "calmly" worked his way to Rome, stopping in cities throughout the east, Asia Minor, the Balkans, "much in the manner of princes who had ruled a more quiescent empire." He arrived in the capital and took up residence in the palace. In a short time, Philip proved an active administrator. A denizen of the imperial city in his reign might be forgiven for believing it was business as usual. But, within a year of the exuberant celebration of Rome's millennium, the fabric of the empire started to come unraveled.²²

The Roman Empire had seen dynastic instability before. It had suffered humbling losses and survived years of dearth. But what was poised to transpire, starting in the later 240s, was without precedent: a comprehensive breakdown of the frontier system, the total demise of an ancient monetary regime, more-than-transient rival emperors inside Roman territories. The next years would see cascading change that shattered all centralized institutional control of circumstances. The crisis was "so extreme in itself that the Empire's survival is almost surprising." It is true that the margin of resilience had been eroded by the gradual progress of time and circumstance. But contemporaries were aware of the sudden, wrenching, environmental background of the crisis, and to the congested list of causes behind the crisis we ought to add the shocks of climate perturbation and pandemic disease.²³

Christians in this time of trouble would coin the idea that they lived in the "old age of the world." It was a metaphor they came to elaborate in a war of ideas. For in the midst of crisis, an untimely public spat erupted about the nature of the gods. The emperors soon fixed blame for the crisis on the failure of the Christians to worship the gods properly. The Christians protested that, in reality, the earth itself was simply passing into senescence. We would do well to take this polemic seriously, on its own terms, for it was articulated in a very specific key by highly trained rhetoricians. Less than a generation after Tertullian feasted his eyes on the ebullient vitality of civilization in Roman Africa, another Carthaginian, Cyprian, had come to believe it was obvious that "the world has grown old and does not stand in the vigor whereby it once stood, nor do the strength and liveliness that once availed it still abide.... In winter there is not such an abundance of rains to nourish the seeds. The summer sun burns less bright over the fields of grain. The temperance of spring is no longer for rejoicing, and the ripening fruit does not hang from autumn trees."24

Scholars have rummaged the libraries of ancient philosophy looking for the ancestry of Cyprian's metaphor. But we have somehow not taken seriously the most direct source of the metaphor's potency, the biological assumptions about aging. For the ancients, to age was to become cold and dry. The young were hot and moist, fervid with energy. These concepts were expressed with clarity in ancient conversations about diet. The young, for example, had to take care with wine, which threatened to overheat their already ardent systems. The excess of heat loosened their self-control, and its disinhibiting qualities made wine, in the words of a second-century novel, a kind of "sex fuel." But for the elderly, the warm wash of wine was invigorating. It slowed the desiccation of the body. Galen wrote often of the "dry nature of old people's bodies. The very reason that each part becomes dry is that it is unable to receive the same degree of nourishment because of the weakness of the heat." To grow old was a prolonged evaporation, leading ultimately to chill death. "Since death is the extinguishing of the innate heat, old age is, as it were, its fading away."

This view of aging is precisely what Cyprian had in mind, when he claimed that the world had grown grey. "The falling rays of the setting sun are not so bright or brilliantly fiery. . . . The fountain that once overflowed from abundant springs, now forsaken by old age, scarcely yields a drop." For

Cyprian, the world itself had become cold and dry. The world was a pale old man, leaning into the grave.²⁵

The natural archives prove our human witnesses faithful. The smiling days of the Roman Climate Optimum came tripping to an end in the later second century. The break was not sharp. The RCO quietly faded away, and what replaced it was the Late Roman Transition, a period of indecision and disorganization, of sharper variability, lasting some three centuries. The changes were global in scale. Solar variability was the main external forcing mechanism. The sun weakened on the Romans. The beryllium isotope record shows a precipitous drop in insolation in the AD 240s. Cooling followed. In the Alps, after centuries of melt, the ice of the Great Aletsch started creeping down the mountain. So did the Mer de Glace glacier in the Mont Blanc Basin. Records as far apart as Spain, Austria, and Thrace show a coordinated bout of cooling. Cyprian was probably right to sense the chill winds of a cooler age in the middle of the third century.²⁶

The outstanding feature of the RCO had been anomalous humidity across the Mediterranean. In the RCO, the long march of the Holocene toward greater aridity had taken a pause. But when the RCO broke, the effects of a longer cycle of aridification were unmasked.

In the short term, the AD 240s stand out as a moment of piercing drought in the southern rim of the Mediterranean. Drought parched Cyprian's North Africa. The bishop's public defense of Christianity was pitched to a society that had just survived a wrenching spell of aridity. Christians were inevitably blamed "if the rains fall from above but rarely, if the land is given over to dust and becomes desolate, if the barren earth sprouts hardly a few pale and thirsty blades of grass ... if the drought causes the spring to cease." The failure of the skies left the cities short of food, but Cyprian acidly criticized the storehouses of the rich, who sought to profit in the crisis. The entire crisis was an evangelical moment, an invitation to the security of a faith that promised life beyond the present distress. "If the vine fails, the olive tree cheats us, and the burning field withers with crops dying in the drought, what is that to the Christians?" The desiccating landscape was the background of Cyprian's entire performance as a Christian spokesman.²⁷

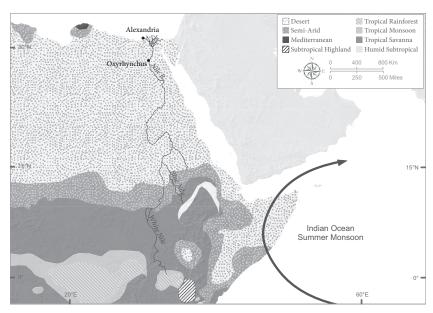
At the same time, drought struck in Palestine. Abutting the desert, the agricultural belt of the Levant always awaited the coming of the rains with pious suspense. In the rabbinic texts of the second and third centuries, precipitation is virtually a miracle. The hardness of the land was deeply embedded in the contemporary worldview; since the destruction of the Temple in AD 70, there had been dryness in the land. The monuments of rabbinic literature might not be the safest place to search for unbiased climatological

records, but the memories of drought surrounding the sages of the AD 230s–240s are insistent, and we may posit a historical substratum to the legends of the rabbis. Ḥanina bar Ḥama was major rabbinic figure, a protégé of the great Judah I, who played a leading role in the school at Sepphoris and lived to ripe old age (died ~AD 250). In the stories attached to him, drought is an overbearing problem. In one episode, the rains for a time failed both in the Galilee and to the south in Judea. A rabbi in the south made it rain by instituting a public fast, while the drought in Sepphoris endured because "their hearts are hard." Eventually the waters came, but the memories of an epochal drought, and its long-awaited alleviation, clung to the memory of this leading rabbi.²⁸

In straitened circumstances, the empire could rely on Egypt. The green ribbon of the Nile valley was miraculously fertile. This was the empire's great insurance policy. The valley's unique ecology hedged the empire against the petty vagaries of the Mediterranean climate. The Nile River drains two main branches. Its steady baseline flow discharges the White Nile, whose headwaters lie in equatorial Africa. The annual inundation the surfeit of water and silt that rise above the baseline flow—is the handiwork of the Blue Nile. Some 90 percent of the Nile's floodwaters originate in monsoon rains that fall in East Africa in the summer; the Blue Nile gathers the runoff of the highlands in Ethiopia and carries it downstream, where it joins the regular flow of the White Nile at Khartoum. The result is the greatest natural irrigation pump in the world, harnessed by human civilization millennia before the coming of the Romans. The life-bringing waters and fertile silt rendered Egyptian agriculture exceptionally productive. Egypt was the breadbasket of Rome, and a boon to much of the empire.29

The yearly rise and fall of the river was a sacred rhythm, anticipated with hopeful prayers. As the ancients knew all too well, the divine gift of the flood was not constant. In the course of a lifetime, any priest or peasant watched good years and bad years pass by. What even their carefully trained eyes could not have noticed were the imperceptibly slow but ultimately decisive cycles of change beneath these annual variations.

In the very long term, over the millennia of the later Holocene, the Nile's discharge has gradually declined, as the monsoon belt has shifted southward and pulled the Intertropical Convergence Zone with it. Against the backdrop of this broader secular shift, on shorter timescales lasting decades or centuries, the Nile flood has been alternatingly dependable or erratic. Like the crests and troughs of a business cycle, the Nile flood has had lengthy mood swings that could affect the course of civilization along the valley



Map 11. Nile Hydrology and Climate Mechanisms

and beyond. For the period after AD 641, these phases can be followed in the world's oldest, continuous human record of climate: the Nilometer readings preserved by Arabic chronicles. In earlier periods, the record is patchy and indirect. But the evidence we do have argues that the centuries of Roman rule witnessed profound changes in the Nile's behavior.³⁰

The Nile records again suggest that the Roman Empire's builders had benefitted from impeccable timing. Michael McCormick and I assembled a database of flood quality in the centuries of the early empire, based on earlier collations of the papyri data (often indirect and uncertain) for good and bad floods in the Roman period. The Nile record parts into two distinct phases, one running from the annexation by Augustus down to ca. AD 155, the second from AD 156 to the end of the third century. The earlier period was marked by more dependable inundations and a higher proportion of excellent floods; the later period saw a disproportionate number of the worst floods.

Moreover, in precisely the same years that witnessed the phase shift, the AD 150s, for the first time a new kind of document, the "declaration of unflooded land," appears in the papyri. Its origins are obscure, but these declarations may well have been a response to the onset of a more erratic regime of Nile flooding.³¹

The physical evidence for Nile variability is, alas, more indirect. There is a strong connection between the Nile inundation and the mode of global climate variability known as the El Niño–Southern Oscillation (ENSO). In El Niño years, the waters of the eastern Pacific are warmed, and the monsoon rains far to the west are suppressed; a strong El Niño is correlated with weak Nile floods. Today El Niños occur every 3–5 years, but ENSO periodicity has varied over time.

Unfortunately, high-resolution ENSO records going back to the first millennium remain rare and uncertain. But one sedimentation record from Ecuador suggests that during the Roman Climate Optimum, ENSO events were very rare (once every 20 years or so). The quiescent ENSO meant an active and reliable flood regime in Egypt, and it marks yet another way that the RCO exhibited features resembling the mid-Holocene. Then, in the centuries of the Roman Transitional Period, ENSO events became extremely common—every third year or so. The unusual good fortune of the Romans ran out, long after they had come to depend on levels of Egyptian productivity that assumed anomalously favorable conditions.³²

What is not in any doubt is that, just when the Romans most needed a buffer against bad fortune, the Nile abandoned them spectacularly.

In AD 244, the waters failed to rise. In AD 245 or 246, the floods were weak again. By March of AD 246, before the harvest, public officials in Oxyrhynchus were taking emergency measures otherwise unparalleled in the record. There was a command to register all private stocks of grain, within twenty-four hours, under threat of drastic penalties. The state carried out compulsory purchases, at shockingly high prices, 24 drachmai per artaba. Normally the government set prices that were favorable to itself, but 24 drachmai was dear: about twice what we might expect for the period, implying acute desperation to acquire grain even at a high cost. Two years later, in AD 248, the shortage was still a gripping problem. A papyrus of that year refers to the "present emergency" and a scramble to fill the offices handling the public food supply. In another papyrus of AD 248, an individual refused to fulfill the obligatory office of food supply, surrendering all his belongings to dodge it. At this same moment, the bishop of Alexandria claimed that the riverbed was as parched as the desert—which, if it is not just a rhetorical figure, actually points to the simultaneous failure of the White and Blue Niles. In all, this amounts to the severest environmental crisis detectible at any point in the seven centuries of Roman Egypt.³³

The climatic turbulence came at an inauspicious time. Much has been made of the payoff to secure the Roman army's retreat from Persia: 500,000 *aurei*. That was an exorbitant ransom. But we can crudely estimate the

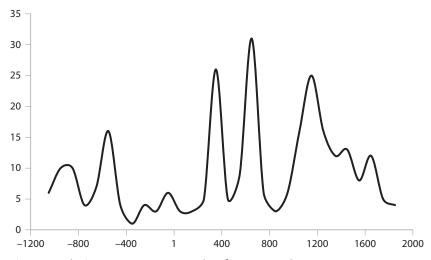


Figure 4.2. El Niño Events per Century (data from Moy et al. 2002)

impact of a provincial-scale drought in Egypt, if only to attune our imaginations to the possibilities. The wheat crop on a plot of land depended on any number of factors, including the quality of the land sown. But the flood was the silent partner in the farming business. On one well-known third-century estate, wheat yields on a series of arable plots within the same region ranged, in the space of a few years, from 7 to 16.6 artabas (the unit of dry measure, equivalent to 38.8 liters) per aroura (the unit of land, equivalent to .2756 hectares). Based on an average of ~12 artabas per aroura, the annual gross production of Egypt has been estimated at 83 million artabas. If a year with a poor flood reduced yields by only 10 percent, which seems a conservative estimate, the total economic cost to the province was 8.3 million artabas, at contemporary prices equal to 1 million aurei or twice the payment to the Persian king, Shapur.

The Roman state extracted at least 4–8 million *artabas* of wheat from Egypt each year; if a drought cost the state only 20 percent of its annual tax revenue from Egypt, the value would be 96,000–192,000 *aurei*. In fact, the damage could have been multiples of this: when the Nile failed in medieval Egypt, gruesome starvation often followed. A run of consecutive poor floods was exponentially worse, as the margins of resilience wore thin. While we cannot be precise or certain, it is reasonable to conclude that drought was at least as implicated in the start of the crisis as the sunk costs of the failed invasion.³⁴

The challenge for us is to suspend our knowledge of what comes next. The entire generation leading up to crisis was not a prelude to the inevitable.

The Severan and post-Severan emperors had achieved a kind of narrow equilibrium, but the concatenation of geopolitical and environmental shocks were a dangerous threat to the new order. The droughts of the AD 240s alone would have pushed the imperial system to the brink of what it could manage. But nature had still another unhappy twist waiting for the Romans. Not for the last time, spasms in the global climate system were closely followed by the advent of an unfamiliar infectious disease. The sweeping violence of a new pandemic was, ultimately, more than the structures of the empire could bear. Just a few years after the jubilant celebrations of Rome's eternity, the empire found its continued existence entirely uncertain.

THE PLAGUE OF CYPRIAN: THE FORGOTTEN PANDEMIC

Cyprian was born in the boom years of Roman Carthage, in the reign of Septimius Severus, to a family of modest prosperity. He received a liberal education and became a teacher of rhetoric. That is the sum of our knowledge about the early life of a man destined to become the most important figure of the western church in the third century.

The meager biographical details do not help us to understand why, around AD 245–46, Cyprian made the highly eccentric decision to become a Christian. In the early third century, there were probably no more than a few hundred thousand Christians, lightly scattered across the empire. The pagan gods still unquestionably ruled in the hearths and temples of the Roman Empire. We should not miss what a stroke of good fortune it was for the Christian movement in Carthage to gain a literate, much less a truly educated, entrant. It was a coup. No time was wasted making the most of it, and by AD 248 Cyprian found himself the bishop of Carthage. The ten years of his episcopate, down to his martyrdom in AD 258, would prove to be among the most consequential in the history of the church, thanks in large measure to the pestilence which historical memory has attached to his name.³⁵

The bishop's writings furnish the most vivid surviving testimony to the epidemic, and his legacy was soon associated with the event in Christian chronicles. From there, the plague went down in history connected to the name of Cyprian. It is a name that has often misled. The established view, represented in the solid tomes of the *Cambridge Ancient History*, describes the plague as "one which affected Africa in the mid-third century." Because William McNeill noticed the Plague of Cyprian in his history of infectious disease, it still finds mention in general histories of disease. But the Plague

of Cyprian has fallen into complete oblivion among scholars of antiquity. In the most authoritative recent surveys of the period, it fails to garner even a passing remark.³⁶

This neglect has many causes, including changing fashions that have tried to question the severity of the third-century crisis. But more subtly, the neglect originates in a failure to appreciate how exceptional true pandemic events have been. The simple fact of a mortality event attested contemporaneously at far ends of the empire merits close investigation. The Plague of Cyprian was not an episode in the life of third-century Carthage; it was a transcontinental disease event of rare magnitude.

The Plague of Cyprian struck in a period of history when basic facts are sometimes known barely or not at all. Yet the one fact that virtually all of our sources do agree upon is that a great pestilence defined the age. Inscriptions, papyri, archaeological remains, and textual sources collectively insist on the high stakes of the pandemic. In a recent study, I was able to count at least seven eye-witnesses, and a further six independent lines of transmission, whose testimony we can trace back to the experience of the pestilence. What is starkly lacking, however, is a Galen. The dumb luck of having a great and prolific doctor to guide us has run out. But, now, for the first time, we have Christian testimony. The church experienced a growth spurt during the generation of the plague, and the mortality left a deep impression in Christian memory. The pagan and Christian sources not only confirm one another. Their different tone and timbre give us a richer sense of the plague than we would otherwise possess.³⁷

The pestilence came from Ethiopia and migrated north and west across the empire. So the chronicles tell us, and we might suspect slavish emulation of the plague account in Thucydides, the model literary description of a plague, familiar to every educated Greek. But two telling clues corroborate the possibility that again a microbial agent had invaded the empire from the southeast. First, archaeologists have discovered a mass grave adjacent to a body-disposal operation at the site of ancient Thebes, in Upper Egypt. Lime was mixed on site, to be poured over bodies that were then hastily incinerated. The disposal site dates to the middle of the third century, and the utter uniqueness of the corpse-burning and mass disposal enterprise argues that something about the disease had startled the inhabitants into extreme measures. The more decisive evidence for the pandemic's southern origin is provided by the bishop of Alexandria, who places the disease in the Egyptian metropolis by at least AD 249. The first dateable evidence for the pandemic in the west comes from AD 251, at Rome. The chronology affirms an eastern point of entry and vindicates the chronicles.³⁸

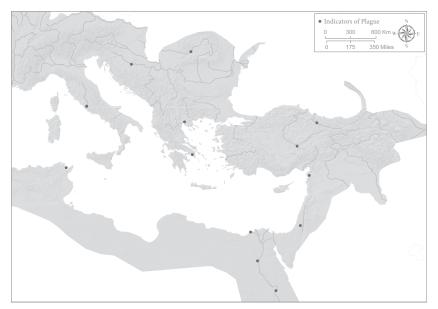
The Plague of Cyprian raged for years. The chronicles report a plague lasting fifteen years, but it is unclear exactly which fifteen-year span they mean. There may have been a second wave sometime around AD 260. The emperor Claudius II in AD 270 was supposed to have been killed by a pestilence, but whether his death truly belongs to the same pandemic is entirely obscure. The sources insist upon a prolonged event, as the mortality coiled its way around the empire, with at least two pulses in the city of Rome. One of the later chronicles actually preserves the significant detail that some cities were struck twice. It is unfortunately impossible to be more precise. The Plague of Cyprian is in the background of imperial history from ca. AD 249 to AD 262, possibly with even later effects around AD 270.³⁹

The geographic scope of the pestilence was vast. "There was almost no province of Rome, no city, no house, which was not attacked and emptied by this general pestilence." It "blighted the face of the whole earth." The plague of Cyprian is attested everywhere we have sources. It hit the largest cities like Alexandria, Antioch, Rome, and Carthage. It attacked the "cities of Greece" but also more remote urban places like Neocaesarea in Pontus and Oxyrhynchus in Egypt. According to one report, the Plague of Cyprian raced through town and countryside alike; it "afflicted cities and villages and destroyed whatever was left of mankind: no plague in previous times wrought such destruction of human life." The Plague of Cyprian was an empire-wide event. 40

The lack of a medical witness like Galen is partly compensated by the vivid account of the disease in Cyprian's sermon on the mortality. The preacher sought to console an audience encircled by unfathomable suffering. It took no mercy on his Christians.

"The pain in the eyes, the attack of the fevers, and the ailment of all the limbs are the same among us and among the others, so long as we share the common flesh of this age." Cyprian tried to ennoble the victims of the disease, likening their strength in pain and death to the heroic intransigence of the martyrs. Cyprian conjured the symptoms for his hearers. "These are adduced as proof of faith: that, as the strength of the body is dissolved, the bowels dissipate in a flow; that a fire that begins in the inmost depths burns up into wounds in the throat; that the intestines are shaken with continuous vomiting; that the eyes are set on fire from the force of the blood; that the infection of the deadly putrefaction cuts off the feet or other extremities of some; and that as weakness prevails through the failures and losses of the bodies, the gait is crippled or the hearing is blocked or the vision is blinded." 41

Cyprian's account is central to our understanding of the disease. The pathology included fatigue, bloody stool, fever, esophageal lesions, vomiting,



Map 12. Indications of Plague of Cyprian

conjunctival hemorrhaging, and severe infection in the extremities; debilitation, loss of hearing, and blindness followed in the aftermath. We can complement this record with more isolated and frankly uncertain hints from other witnesses. According to Cyprian's biographer, the disease was characterized by acute onset: "carrying off day by day with abrupt attack numberless people, every one from his own house." At a greater distance from the events, a folk tradition about the Plague of Cyprian from northern Asia Minor insisted on the sheer speed of the attack. "The affliction fell abruptly upon the people, penetrating faster than they expected, feeding on their houses like fire, so that the temples were filled with those laid low by the disease who had fled there in the hope of a cure." The same tradition remembered the insatiable thirst suffered by the victims of the disease (and here at last may be a merely ornamental emulation of Thucydides). "The springs and streams and cisterns were full of those burning with thirst because of the weakness brought on by the disease. But the water was too weak to quench the flame from deep within, leaving those once afflicted with the disease feeling just the same after the water as before."42

The course of the infection and illness was terrifying. This impression is confirmed by another North African eyewitness, a Christian not far removed from the circle of Cyprian, who insisted on the sheer unfamiliarity

of the disease. "Do we not see the rites of death every day? Are we not witnessing strange forms of dying? Do we not behold disasters from some previously unknown kind of plague brought on by furious and prolonged diseases? And the massacre of wasted cities?" The pestilence, he argued, was a manifest encouragement to martyrdom, since those who died the glorious death were spared the "common fate of others amidst the bloody destruction of ravaging diseases." The Plague of Cyprian was not just another turn through the periodic cycle of epidemic mortality. It was something qualitatively new—and the evocation of its "bloody" destruction may not be empty rhetoric, if hemorrhagic symptoms are implied.⁴³

The disease was of exotic origin and moved from southeast to northwest. It spread, over the course of two or three years, from Alexandria to other major coastal centers. The pandemic struck far and wide, in settlements large and small, deep into the interior of empire. It seemed "unusually relentless." It reversed the ordinary seasonality of death in the Roman Empire, starting in the autumn and abating in the following summer. The pestilence was indiscriminate; it struck regardless of age, sex, or station. The disease invaded "every house."

One account predictably blamed the "corrupted air" that spread over the empire. But another chronicle tradition, going back to a good contemporary historian in Athens, recorded that the "disease was transmitted through the clothes or simply by sight." The observation is notable; in a culture without even a rudimentary sense of germs, the comment betrays a pretheoretical sense of contagion. The concern that the disease could be transmitted by clothing or eyesight suggests at least a dim awareness of an infectious origin. And it just might provide a further hint that the disease affected the eyes. The ancients harbored plenty of eccentric notions about the powers of eyesight, among them that it was tactile, ejecting a flow of particulates from the eye of the looker. The bloody eyes of Cyprian's victims may have presented a terrifying visage, in a culture where the eyes had the power to reach out and touch.⁴⁵

The death toll was grim. We have an intriguingly specific report from the bishop of Alexandria, who claimed that "this immense city no longer contains as big a number of inhabitants, from infant children to those of extreme age, as it used to support of those described as hale old men. As for those from forty to seventy, they were then so much more numerous that their total is not reached now, though we have counted and registered as entitled to the public food ration all from fourteen to eighty; and those who look the youngest are now reckoned as equal in age to the oldest men of our earlier generation." The reckoning implies that the city's population had

declined by ~62 percent (from something like 500,000 to 190,000). Not all of these need be dead of plague. Some may have fled in the chaos. And we can always suspect overheated rhetoric. But the number of citizens on the public grain dole is a tantalizingly credible detail, and all other witnesses agreed on the scale of the mortality. An Athenian historian claimed that 5,000 died each day. Witness after witness—dramatically if imprecisely—testified that depopulation was invariably the sequel of the pestilence. "The human race is wasted by the desolation of pestilence."

These haphazard clues do not equip us well to identify the pathogenic agent of the Plague of Cyprian. But the range of suspects capable of causing a disease event of this scope is not large, and some possible agents can be almost certainly exculpated. Bubonic plague does not fit the pathology, seasonality, or population-level dynamics. Cholera, typhus, and measles are remote possibilities, but each poses insuperable problems. Smallpox must be a serious candidate. The two-generation lapse between the episode under Commodus and the Plague of Cyprian means that effectively the entire population would have been susceptible again. The hemorrhagic form of the disease might also account for some of the features described by Cyprian.

But in all the case for smallpox is weak. A North African author claimed it was an unprecedented disease (though whether he would have had any memory of previous smallpox epidemics is of course questionable). None of our sources describe the full-body rash that is the distinctive feature of smallpox. In the church history of Eusebius, written in the early fourth century, an outbreak more like smallpox was recounted in AD 312–13. Eusebius both called this a "different illness" than the Plague of Cyprian and also distinctly described the pustular rash. The exotic origins of the third-century event, again from beyond the Roman Empire, do not suggest the eruption of a now-endemic pathogen. Finally, the putrescent limbs and permanent debilitation of the Plague of Cyprian are not a fit for smallpox. None of these clues are conclusive, but collectively they militate against the identification of smallpox.⁴⁷

Any identification must be highly speculative. We would offer two candidates for consideration. The first is pandemic influenza. The influenza virus has been responsible for some of the worst pandemics in human history, including the "Spanish Flu" epidemic that carried off some 50,000,000 souls at the end of World War I. The lack of clear evidence for influenza from the ancient world is puzzling, because the flu is old and it was undoubtedly not a stranger in the ancient world. Influenza is a highly contagious acute respiratory disease that comes in many forms. Most types are relatively mild,

causing familiar coldlike symptoms. Other rare types of influenza are more menacing. Zoonotic forms of the disease, especially those native in wild aquatic birds, can be pathogenic to other animals, including pigs, domestic fowl, and humans; when these strains evolve the capacity to spread directly between humans, the results are catastrophic. There have been four global outbreaks in the last century, and avian influenza (which includes some dreaded strains such as H5N1) remains a terrifying threat today.⁴⁸

Pathogenic zoonotic influenzas are viciously lethal. They induce an overheated immune response which is as dangerous as the viral pneumonia itself; hence, the young and healthy are paradoxically put at risk by the vigor of their immune response. The lack of any respiratory symptoms in the account of the Plague of Cyprian is a strike against the identification. But it is worth reading some observations of the 1918 pandemic. "Blood poured from noses, ears, eye sockets; some victims lay in agony; delirium took away others while living.... The mucosal membranes in the nose, pharynx, and throat became inflamed. The conjunctiva, the delicate membrane that lines the eyelids, becomes inflamed. Victims suffer headache, body aches, fever, often complete exhaustion, cough.... Often pain, terrific pain.... Cyanosis. . . . Then there was blood, blood pouring from the body. To see blood trickle, and in some cases spurt, from someone's nose, mouth, even from the ears or around the eyes, had to terrify. . . . From 5 to 15 percent of all men hospitalized suffered from epistaxis—bleeding from the nose." Pandemic influenza might indeed account for the horrifying experience of the Plague of Cyprian.49

The winter seasonality of the Plague of Cyprian points to a germ that thrived on close interpersonal contact and direct transmission. The position of the Roman Empire astride some of the major flyways of migratory birds, and the intense cultivation of pigs and domestic fowl such as chickens and ducks, put the Romans at risk. Climate perturbations can subtly redirect the migratory routes of wild waterfowl, and the strong oscillations of the AD 240s could well have provided the environmental nudge for an unfamiliar zoonotic pathogen to find its way into new territory. The flu is a possible agent of the pestilence.

A second and more probable identification of the Plague of Cyprian is a viral hemorrhagic fever. The pestilence manifested itself as an acute-onset disease with burning fever and severe gastrointestinal disorder, and its symptoms included conjunctival bleeding, bloody stool, esophageal lesions, and tissue death in the extremities. These signs fit the course of an infection caused by a virus that induces a fulminant hemorrhagic fever. Viral hemorrhagic fevers are zoonotic diseases caused by various families of

RNA viruses. Flaviviruses cause diseases like Yellow Fever and Dengue Fever, which have some resemblance to the symptoms described by Cyprian. But Flaviviruses are spread by mosquitoes, and the geographic reach, speed of diffusion, and winter seasonality of the Plague of Cyprian rule out a mosquito-borne virus.50

Other families of viral hemorrhagic fevers are borne by rodents or transmitted directly between humans. Arenaviruses, like Lassa Fever, are spread by rodents. Old World arenaviruses are endemic in reservoirs in Africa, and it is plausible that the Plague of Cyprian was caused by such an agent. However, great rodent-borne pandemics will probably have to wait for the Justinianic Plague. The distinctive biology of the plague bacterium and its intricate interspecies dynamics make bubonic plague capable of continental-scale pandemics. The speed of travel and scale of the outbreak during the Plague of Cyprian would be unlikely for an arenavirus.

The speed of diffusion points to direct human-to-human transmission. The belief that caring for the sick and handling the dead were fraught with danger underscores the possibility of a contagion spread between humans. Only one family of hemorrhagic viruses seems to provide a best match for both the pathology and epidemiology of the Plague of Cyprian: filoviruses, whose most notorious representative is the Ebola Virus.⁵¹

Filoviruses are millions of years old. Fragments of their genetic material are anciently embedded in mammalian genomes, and for millions of years they have infected bats, insectivores, and rodents. Yet filoviruses, like Ebola Virus and Marburg Virus, were only recognized in the second half of the twentieth century during a series of small-scale outbreaks. The Ebola epidemic of 2014 brought further attention to the family. The natural host of the Ebola Virus remains unconfirmed, although bats are suspected. Ebola Virus grabs public attention because of its ghastly clinical course and extreme case fatality rates.

To cause an epidemic, the Ebola Virus must first leap from its host species to a human; this probably occurs when humans come into contact with infected bats or apes. Once infected, after a brief incubation period (on average 4-10 days, sometimes longer), victims suffer intense fever and a disease that breaks down multiple systems simultaneously, including gastrointestinal and vascular involvement. Conjunctival injection and severe hemorrhagic symptoms could well account for the disturbing reports of Cyprian. Tissue necrosis and permanent disfigurement of the limbs might reflect Cyprian's description of extremities turning putrid and becoming irreversibly disabled. Case fatality rates, even with modern treatment, are grotesquely high: 50-70 percent. Death usually comes between days 6 and 16;

survivors are thought to possess immunity. The Ebola Virus is transmitted by bodily fluids, but *not* aerial droplets; it spreads easily within households. Caregivers are at special risk, and cadavers remain a potent source of infection. The observance of traditional burial rites has been a problematic risk factor even in recent outbreaks.⁵²

Retrospective diagnosis from anguished reports of nonmedical personnel across nearly two thousand years is never going to offer great confidence. But the hemorrhagic symptoms, the shocked sensibilities, and the insistence on the novelty of the disease all fit a filovirus. An agent like Ebola Virus could diffuse as quickly as the Plague of Cyprian, but because of its reliance on body fluids for transmission, it could exhibit the slow burning, "unusually relentless" dynamics that so struck contemporary observers. The obsession with deadly corpses in the third-century pandemic strikes a profound chord, given the recent experience of the Ebola Virus. The uncertainty lies in our profound ignorance about the deep history of pathogens like Ebola that never became endemic in human populations. As historians, we understandably default to the familiar suspects. But our broadening awareness of the incessant force of emerging disease, at the frontier between human society and wild nature, suggests a place for significant disease events in the past, like the Plague of Cyprian, caused by zoonotic diseases that wreaked havoc and then retreated back to their animal hosts.

The Roman Empire was once more the victim of a pest from outside the endemic pool of native diseases. The global climate turbulence of the AD 240s, which clearly affected the monsoon systems, stirred ecological changes that may have led to the eruption of the Plague of Cyprian. For over a decade, it wound its way through the empire, diffusing swiftly but burning

Table 4.1. The Plague of Cyprian

Pathology	Epidemiology
Acute onset fever	Exotic origins, east-to-west
Weakness	Empire-wide within 2 years
Bloody diarrhea	"Relentless," enduring, 15 years
Esophageal hemorrhage	Dangerous to caregivers
Continual vomiting	Corpses contagious
Conjunctival bleeding	Directly transmissible, by sight
Putrescence in the limbs	Struck households
Permanent disability	Indiscriminate
Loss of hearing, sight	Urban and rural
	Winter peak
	High mortality
	Follows severe drought

slowly. The pandemic struck soldiers and civilians, city dwellers and villagers alike. Pagan and Christian authors, with very different outlooks and very different motivations, writing at far ends of the empire, uniformly agreed that this pestilence was unlike anything the empire had faced before.

In the Antonine Plague, the fibers of the imperial structure were frayed but not pulled asunder. By the time of the Plague of Cyprian's appearance in AD 249 there was much that was different. The empire's stores of reserve energy were depleted. Perhaps this microbial enemy was just more sinister. In this event, the center could not hold. There is much that must remain uncertain about the Plague of Cyprian, but not this: in its immediate wake, anarchy was loosed on the world.

THE BLOOD-DIMMED TIDE

At the century games, choirs of boys and girls sang hymns boasting of the empire's unquestioned supremacy. In AD 248, the empire worked. There was one emperor, in Rome, the city whose people remained the symbolic focus of the empire. Philip's legitimacy was affirmed by senate and army. Even in years of dearth, this legitimacy allowed him to control the machinery of an empire stretching from Britain to Egypt, Syria to Spain. Each year, the cycle of tax collection brought in enough grain to feed the people and army; between money collected and the empire's silver mines in central Europe, the emperor could pay the soldiers strung along the vast frontier. The money paid to soldiers had real value; the denarius went as far as it had under Septimius. The empire obeyed one man. But the stupendous fabric was about to come undone. Philip's later coinage shows signs of unprecedented stress. The army revolted on the northern frontier, and soon Decius, the man sent to quell the rebellion, installed himself on the throne. The empire had passed a point of no return.⁵³

The demise of Philip inaugurated two decades of chaos. Between the millennial celebration in AD 248 and the accession of the soldier-emperor Claudius II in AD 268, the history of Rome is a confusing tangle of violent failures. The structural integrity of the imperial machine burst apart. The frontier system crumpled. The collapse of legitimacy invited one usurper after another to try for the throne. The empire fragmented, and only the dramatic success of later emperors in putting the pieces back together prevented this moment from being the final act of Roman imperial history. A thoroughgoing fiscal crisis made it impossible to collect taxes and maintain

the currency with any credibility. This failure violated what the Romans recognized as the fundamental axiom of empire: "an empire requires soldiers, and soldiers require money." As the currency regime dissolved, the infrastructure of the private Roman economy started to crumble. The fire fed on itself. An accelerating spiral of disorder engulfed the empire.⁵⁴

By design, the Roman frontier system was defensible, not impenetrable. But almost simultaneously, in the early AD 250s, the defensive network imploded along all of the main fronts. A later historian summarized the vastness of the failure. "The Alemanni, having devastated the Gauls, penetrated into Italy. Dacia, which had been adjoined by Trajan beyond the Danube, was then lost. Greece, Macedonia, Pontus, and Asia were destroyed by Goths. Pannonia was plundered by Sarmatians and Quadi. Germans advanced all the way to the Spains and subjugated the noble Tarraco. The Parthians [i.e. the Persians], having occupied Mesopotamia, began to lay claim to Syria." The military crisis was marked by the concatenation of attacks in multiple theaters and barbarian incursions into parts of the soft interior normally insulated from the violence of the imperial periphery. The smell of blood seemed to draw attacks like never before.⁵⁵

In the words of an oracle, "the universe will be cast into chaos with the destruction of mankind in pestilence and war." The relationship between pestilence and frontier insecurity was obvious to contemporaries. Sober sources drew a causal link between the demographic damage of the pandemic and military adversity. In one case, the advances of the Persian King Shapur I were directly motivated by his awareness that the Roman army was depleted by the mortality. The barracks were auspicious for the spread of a virus transmitted directly from one victim to the next. Germs were the first, invisible wave of attack in the great invasions. ⁵⁶

The frontiers buckled in the early AD 250s. The first to break was the Danubian front, where Carpi and Goths invaded in AD 250. In the summer of AD 251, the emperor Decius and his army were slaughtered at the Battle of Abritus by the able Gothic king Cniva. The Romans lost control of the entire Danube line.

Next the Euphrates frontier fell. In AD 252, Shapur I went on the offensive in the east. It was a lightning campaign unlike anything the eastern provinces had suffered. Syria was overrun, and Persian armies plundered the interior of Asia Minor. At the same time, new tribes of Goths took to the sea and rampaged from the Black Sea to the Aegean. Helpless cities as far as Ephesus were devastated.

In the mid-250s, the Rhine system disintegrated. Franks and Alemanni raided the wealthy provinces of Gaul from around AD 256; for virtually a

generation, this territory was the victim of large-scale looting. When the emperor Gallienus tried to respond with a northern operation, the heart of the empire was exposed, and by AD 260 an invasion from the upper Danube reached the outskirts of Rome itself. That same year, Gallienus learned that his father and co-emperor Valerian had been shamefully captured alive by Shapur I. The great victory monument carved into the rock cliffs at Nagš-i Rustam celebrates the humiliation of the Romans. On every front including obscure violence in Africa and Egypt—the Roman Empire was gravely wounded.57

Simultaneous pressure along both major frontiers was always a formula for catastrophe. Now, too, the foes were more formidable. The Persians were ably led. The Gothic confederation represented the peril of more advanced social formations beyond the northern frontier. There had been a slow "technology convergence" between the Romans and their Germanic neighbors. The evolution of more sophisticated enemies weighed invisibly on the entire edifice of the Roman Empire. But, once the pestilence hollowed out the Roman frontier shield, the structural weaknesses of the imperial system were exposed to hungry and ambitious peoples on the far side of its borders, with ancient grudges against the belligerent empire. There should be no doubting the causal importance of the pandemic in the military crisis. It exposed the latent threat and allowed the frontier system to be overwhelmed by the violent tide.58

We hear of hastily assembled popular militias defending cities deep within the empire and of walls hurriedly built. An altar to the goddess Victory was erected in AD 260 in Augsburg, celebrating the success of the provincial army alongside "the people." Together, this makeshift militia routed the invading barbarians on return to Germany and freed "many thousands of Italian captives." Even the "people of Rome," long coddled by their privileges, were armed to repel the invaders in AD 260.

By the AD 260s, there were functionally three Roman Empires, one in the Gauls, one in the east ruled from Palmyra, and the central core state controlled by Gallienus. This last was eventually reduced to the defense of Italy and the Balkan routes leading to Italy, and we know that in the later AD 260s even the towns of Greece, such as Athens, were effectively reliant on what self-help could be scraped together from resources to hand. Strategic annexes like Dacia and the entire territory between the Rhine, Danube, and Main Rivers—known as the agri decumates—were evacuated, and lost, forever. The Roman Empire was unbundled, and it is no wonder that Gallienus, who was able to maintain his office in his shrinking core region until AD 268, cuts a pathetic figure in the collective historical memory of the Romans.⁵⁹

The ebbing of the state's power is mirrored in the coinage. For better or worse, it represents the closest thing we have to a running commentary on the status of the empire. In the AD 250s and 260s, the silver content of the currency fell precipitously. The ancient denominations, the *sesterces* and *denarii*, were unceremoniously melted down; soon these august coins simply ceased to exist, entirely replaced by the *antoninianus*, a revolution quite as imponderable as the disappearance of the dollar would seem to us. Then, in the space of less than two decades, the *antoninianus* was progressively debased until it was a billon coin, a base metal token with an imperceptible wash of silver. The momentum of a currency crisis accelerated, as private holders must have sought to hold on to good metal, pulling it from circulation. Indeed, no other era of Roman history is so productive of coin hoards.

We have glimpses of the gathering currency crisis from Egypt. The coinage maintained its fiduciary value, for a time. But in a papyrus of AD 260, we find a governor forcing bankers to accept "the divine currency of the Augusti." It is telling—both that the bankers tried not to accept it and that the governor could force them to do so. In the generation of pestilence and debasement, there were wild gyrations in the price level of goods and services, of nearly 100 percent. This instability appears modest only in light of what was to come. At the end of the crisis, during the reign of the restorer Aurelian, the effort to put the pieces back together failed. The fiduciary value of the coinage collapsed. Prices leapt tenfold, and a century of galloping

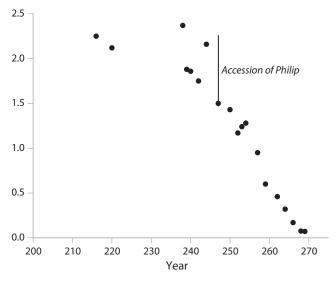


Figure 4.3. Silver (g) per Antoninianus (data: see footnote 60)

inflation was on the horizon. A thousand-year epoch of silver money was doomed to end.60

Humbling military losses, imperial fragmentation, and the inability to pay the troops in hard currency finally undid Gallienus. What is surprising is that his rule lasted so long. It is a testament to the deep reserves of resilience and the power of ideological legitimacy at the core of the Roman Empire. It may also reflect the sheer inability of any alternative to gather strength in the chaos of the long-lasting pestilence. But in AD 268, Gallienus was assassinated in Milan. The coup was orchestrated by a Danubian military officer named Claudius. Claudius II was not just another in a long and blurry line of claimants to the throne. His ascent signaled the arrival of a wholly new kind of emperor and marks not so much the end of crisis as the beginning of a new age. The ground had been cleared by the shock of drought and pestilence, war and fiscal collapse. At last, the age of the barracks emperors was at hand.

RESTORATION AND REVOLUTION

The generation that elapsed between the death of Philip and the ascent of Claudius II was an age of endings in Roman history. Places and villages quietly disappear from the record. The census records in Egypt stop in the 250s. The last of the ancient private endowments vanish. Inveterate habits of public epigraphy simply halt. The grandeur of the civic temples is dimmed. We can even trace the sudden demise of individual ateliers, as the disintegration of economic life and the flow of capital and investment were abruptly snapped. So many of the fibers that once imperceptibly held together the classical order find their ending in this period.

This ground-clearing was both the precondition and the consequence of the political revolution that swept Claudius II into power. The line of emperors that begins with Claudius II liked to advertise their work as a kind of "restoration." But the imperial system that coalesced in the aftermath of pestilence and crisis had a new inner logic. It was a revolution founded on the twin principles that defined the new equilibrium: the imperial machinery would be controlled by military emperors of Danubian extraction, and their soldiers would be rewarded in honest gold. Order was restored around these sturdy premises of the new state.⁶¹

Ironically, the blueblooded prince Gallienus prepared the way for the rise of the soldier emperors. Of impeccable senatorial ancestry, his wealthy





Figure 4.4. Gold Coin (Aureus) of Claudius II Celebrating the Loyalty of the Army (American Numismatic Society)

family had ancient roots in Etruria. His father rose in the service of the Severan regime and attained the consulship. Socially and geographically, the rule of a man like Gallienus hewed to traditions going back to the very foundations of the imperial office. But in his reign, control of the legions was wrested from the senatorial class.

According to a later source, Gallienus "feared that the imperial power would be transferred to the best of the nobility through his sloth," so he became "the first to prohibit the senators from undertaking a military career or entering the army." Whatever the motives, from just this moment, it indeed becomes impossible to find senators commanding Roman forces. The high position of legionary commander, *legatus legionis*, had been the lynchpin of senatorial control over the army. The replacement of senators by professional soldiers in the high commands dispelled a uniquely Roman aristocratic ethos and broke an ancient sociopolitical order stretching back centuries to the late republic. Plague and war again pulled down one cadre of elites and allowed the rise of another, but this time the reconstitution was more radical, and it was a pattern destined to endure. 62

If Gallienus hoped to preclude usurpation, his policy was sorely miscalculated. For centuries, legionary command had been the staging ground for imperial pretenders. Only now, it would be professional soldiers rather than well-bred generals who could rally the troops behind their cause. The ascension of Claudius II, who, notably, had commanded the crack unit of imperial cavalry, was the immediate fulfillment of this possibility. The death of Gallienus marked the end of a certain kind of emperor. But as revolutionary as the social background of Claudius II was, his geographical background was equally consequential. He hailed from Upper Moesia or Lower Pannonia. This corridor of the Danubian plain was anciently filled with Roman veteran colonies. Over the centuries, when legionaries laid down their arms, they mixed with local populations; sons of soldiers followed their fathers patriotically into service; the Danubian frontier hardened one and all to the realities of war. A military culture grew up. The region produced few senators, but many decorated officers. Decade after decade, these officers loyally served their commissioned superiors, but with the empire in shambles and their homeland overrun, they seized the mantle for themselves.⁶³

The life of Claudius II was cut short by the plague. His revolution survived him. Once the Danubian military officers had seized control of the machinery of empire, they refused to relinquish it. Walter Scheidel has brilliantly shown that, down to the reign of Phocas (AD 610), nearly three-quarters of Roman emperors originated from a region constituting 2 percent of the empire's territory. The Theodosian dynasty is virtually the only aberration from the pattern, and it is the exception that proves the rule. The Theodosian dynasty was born in the absolute "perfect storm," in a moment of sudden desperation after the massacre of the officer corps at the Battle of Adrianople (AD 378). From AD 268, the moneyed Mediterranean aristocracy was displaced by a cadre of professional soldiers hailing from a small, northern corner of the frontier. The region was what Ronald Syme called a "zone of energy," at the critical overland juncture where the eastern and western halves of the empire met. The Roman Empire was taken over not just by the military elite of any frontier, but, elites specifically from *this* place. 64

Great empires are often swallowed by their own periphery. That is not what happened to the Romans in the third century. The Roman Empire was restored by an internal frontier zone. The barracks emperors identified as Romans. Ancient Roman blood ran in their veins. They show a streak of impatient traditionalism, for instance, in the application of Roman law. The ethos of the Danubian emperors led them to protect the empire as a whole; Aurelian, the immediate successor of Claudius II, dedicated his energies to the reconquest of the eastern and northwestern provinces of the empire. There was no egregiously conspicuous enrichment of the ancestral homeland in the centuries of Danubian rule. The people of Rome, not of Sirmium or Naissus, remained the beneficiaries of outsized political entitlements. But the work of restoration required bold strokes. The city of Rome was respected as the symbolic center of the empire, but the barracks emperors were not hesitant to set up palace in garrison towns closer to the



Map 13. Two Provinces That Produced Most Late Roman Emperors

scene of the action. The administrative apparatus would be unrepentantly overhauled. Constitutional niceties were set aside for the higher cause of reassembling the empire.⁶⁵

Where the later emperors were clearly not impartial was in the favor bestowed upon the army, especially its officer corps. Claudius II rewarded the loyalty of the soldiers who elevated him . . . in gold. A perceptive scholar of ancient coinage has suggested that this moment was the beginning of late antiquity. The act was born of necessity, with the silver currency in disarray. But it proved unforgettable.

Henceforth emperors paid accession bonuses in gold. The implications were not subtle: where present, the emperor personally handed out the gold, and loyalty oaths were sworn. These bonuses were regularized, and the soldiers would receive one every five years, lest they learn to regret an emperor's longevity. In the course of time, the soldiers' regular stipends, denominated in silver currency, became worthless, and the donatives functioned as a salary. Great victories continued to deserve bonuses too. We gain a sense of the possibilities from a treasure discovered at Arras in northern France in 1922. A clay pot belonging to a military officer held precious jewels, silver objects, and 472 coins, including 25 gold medallions, earned during a military career that seems to have stretched from ca. AD 285–310.





Figure 4.5. Medallion of Constantius I, Arras Treasure (Bibliothèque nationale de France)

One of the gold medallions weighed 53 grams, celebrating the reconquest of Britain by Constantius I, father of Constantine, who is acclaimed as the "restorer of eternal light." Diligence and loyalty were handsomely repaid.66

The politics of gold would redefine state and society from the inside out. The age of the barracks emperors was to be the age of gold.

The spiritual repercussions of the crisis are inevitably more elusive, less mechanical, but in the long run they were even more consequential. Massive mortality events provoke unpredictable religious responses. Fervor and despair change the atmospheric pressure of spiritual life. The Antonine Plague called forth an empire-wide turn to the most archaic layers of Apollo worship. The Plague of Justinian, as we will see, pushed Mediterranean cultures toward a sharp apocalyptic mood. Later, in the Black Death, the persecution of the Jews and the flagellant movement were direct reactions to the plague, while a more abstract cultural fascination with death has seemed linked to the harrowing experience of mass mortality in the later middle ages.

The crisis of the third century was a moment of truth for the traditional civic religions of the ancient world. It also opened the door to the uncanny growth of a marginal religious movement known as Christianity. Within the space of a generation, the confident archaism on full display at the millennial games of Philip had yielded to a religious landscape where highpitched voices of dissent were more audible than ever before.

Already in its incipient phases, the crisis sparked religious conflict. Spontaneous acts of prayer and sacrifice were a proper reaction to the accession of a new ruler. But sometime toward the end of the year AD 249, the emperor Decius required all citizens to partake in an act of sacrifice and





Figure 4.6. Silver Coin (Antoninianus) of AD 251–53 Showing Apollo the Healer (American Numismatic Society)

deployed the machinery of the empire to enforce the order. It may be more than coincidence that, as the pestilence raged in Alexandria and appeared westward bound, the emperor devised a scheme of universal supplication. To the ancient mind, plague was an instrument of divine anger. The Antonine Plague had provoked spectacular acts of religious supplication at the civic level, fired by the great oracular temples of the god Apollo. Apollo was soon at work in the Plague of Cyprian, too. The emperors started minting a new image on the currency, invoking "Apollo the Healer." Religious solutions were desperately sought in Rome. "The peace of the gods was sought by inspection of the Sibylline books, and a sacrifice was made to Jupiter the Healer as they had commanded." The plague unleashed an urgent combination of fear and piety. Whether or not the disease triggered the initial orders of Decius to sacrifice, the Plague of Cyprian was soon implicated in the religious upheaval of the age. ⁶⁷

Scholars have become wary of calling the religious policy of Decius a "persecution." That is, perhaps, too one-sided a view. The desire to extirpate Christianity was not the entire impetus for the policy. The empire-wide order of Decius to sacrifice might be imagined as a scaled-up version of the civic responses that the Antonine Plague had once provoked. But now, in an age of universal citizenship, the response to the crisis was all-encompassing, and compliance was not voluntary. None of this is incompatible with the possibility that suppressing Christianity was a conscious goal of Decius from the beginning. After all, the Christians' refusal to sacrifice was not only an act of defiance; it imperiled the protection of the gods in the face of the enveloping disaster.⁶⁸

Christians were being scapegoated. The religious polemics between pagans and Christians called forth Cyprian's defense of the faith; especially in his apologetic masterwork, the Ad Demetrianum, his principal agenda was to exonerate Christians of guilt for drought, pestilence, and war. We are lacking the prosecution's side of the conversation, but we catch muffled echoes of it a generation later, in the bitter words of the pagan philosopher Porphyry. He blamed the insolence of the Christians for the health catastrophes of the age: "And they marvel that the sickness has befallen the city for so many years, while Asclepius and the other gods are no longer dwellers among us. For no one has seen any succor for the people while Jesus is being honored." It was an attitude that may well have prevailed in the AD 250s.⁶⁹

Decius set up a religious dragnet. Citizens had to prove their loyalty with an act of pagan sacrifice. The individual certificates of sacrifice survive in abundance in the papyri of Egypt. Christian refusal to participate led to even more intense response from the central government, now explicitly aimed at the growing church. Valerian implemented measures that were unequivocally aimed at hunting out Christians. Looking back, the Christian church saw this whole episode as one great trial, the culmination of centuries of imperial effort to repress the faith. But this obscures the circumstances of the persecution, and it misrepresents how tiny the Christian movement remained.

We have only the most impressionistic sense of Christianity's expansion. Down to AD 200, Christians are virtually invisible in the documentary record. If not for later events, the Christians of the first two centuries would be hardly a footnote to history. In the later second century, it has been estimated that there were on the order of 100,000 Christians. By AD 300, there had been staggering change. The clearest sign is the sudden spread of Christian personal names. It has recently been estimated that an astounding 15– 20 percent of the population may have already been Christian in Egypt. Precision is specious, but even on the most cautious set of assumptions, the unavoidable conclusion is that the third century witnessed the explosive transformation of Christianity into a mass phenomenon.⁷⁰

The Jesus movement was propelled by missionary zeal from the start. But the dynamics of something so intimate as "conversion" must be sought in the specific conditions of each generation. The forces of attraction that drew small bands of urban eccentrics to the faith in the second century were not what catalyzed the mass movement of the third century. And even within the third century, the rate of change was not constant. The combination of pestilence and persecution seems to have hastened the spread of Christianity. That was the memory of one Christian community, at Neocaesarea

in Pontus. In the folk legends that attached to the local hero of the faith, Gregory the Wonderworker, the plague was a pivotal episode in the Christianization of the community. The mass mortality painfully showed up the inefficacy of the ancestral gods and put on exhibit the virtues of the Christian faith. However stylized the tale may be, it preserves a kernel of historical recollection about the plague's role in the religious transformation of the community.

Christianity's sharpest advantage was its inexhaustible ability to forge kinship-like networks among perfect strangers based on an ethic of sacrificial love. The church boasted of being a "new *ethnos*," a new nation, with all the implications of shared heritage and mutual obligation. Christian ethics turned the chaos of pestilence into a mission field. The vivid promise of the resurrection encouraged the faithful against the fear of death. Cyprian, in the heat of persecution and plague, pleaded with his flock to show love to the enemy. The compassion was conspicuous and consequential. Basic nursing of the sick can have massive effects on case fatality rates; with Ebola, for instance, the provision of water and food may drastically reduce the incidence of death. The Christian ethic was a blaring advertisement for the faith. The church was a safe harbor in the storm.⁷¹

Once the fire of crisis was burned out, its ashes left behind a fertile field for Christian expansion. Gallienus called a halt to the persecution in AD 260; a peace lasting over forty years fell upon the church. The famous church historian, Eusebius, triumphantly described these days of unhindered growth. "How does one describe those multitudes worshipping and the throngs pressing together in every city and the brilliant assemblies gathered in prayer? Indeed because of these crowds the old buildings no more sufficed for them, and spacious churches were built from the very ground up in all the cities."

Christians moved confidently, in high circles. They are more visible than ever before. In Oxyrhynchus, the city in Egypt whose trash heap has yielded such a trove of papyri, the church becomes more than a shadow in these years. The first papyrus naming a Christian was recorded in AD 256. Shortly thereafter, we can follow the rise of the Christian community through a cleric, Papa Sotas, who may have been the town's first bishop, certainly its earliest known. His career is documented in no fewer than five papyri, which show him writing letters of recommendation, soliciting funds for the church, and moving freely around the eastern Mediterranean—in short, acting like a late antique bishop. In Oxyrhynchus, the church emerges abruptly, from virtual invisibility to a mood of swaggering confidence.⁷²

Meanwhile in Rome the honeycomb of burial caverns we know as the catacombs expanded unhesitatingly. A few burial chambers went back to the late second or early third century; these soon became the hubs of sprawling complexes radiating outward. The third quarter of the third century marked the takeoff, when suddenly the Christian presence underground became something more than a handful of discrete burials. Now, long passageways lined with humble burial notches cut into the walls curled into the lamplit distance. The catacombs were not the romantic hideaway of an outlaw cult, nor the top-down design of ambitious popes. Rather, the catacombs were the continuation in death of the communal bonds that vivified the church above ground, sustained by expansive networks of patronage, a strong but complex sense of identity, and sharp beliefs about the afterlife. There was fluttering energy in this period, with insouciant social mingling in a diverse community that did not yet encompass the superwealthy. The shrines of the martyrs were not yet strongly organized. This was a shadow society, one that weathered the challenge of pestilence and persecution, and emerged on the other side ready for dazzling growth.⁷³

If we knew nothing of Christianity, we would nonetheless describe the third century as an age of inversion within traditional polytheism. The ancient religions floundered. The grand tradition of temple building came sputtering to a standstill. The second century had been an age of exuberant religious construction. Hadrian completed the great temple of Olympian Zeus in Athens, left unfinished since the sixth century ... before Christ. The temples were the gleaming "eyes" of a city. By the middle of the third century, they were tumbling into disrepair. In Egypt, the last temple inscription dates to the reign of Decius. Then, deafening silence. By the end of the century, temples that had recently been the incubators of the most ancient religious lore of humankind were turned into military barns. Rites of imponderable antiquity simply vanished. The old registrations of temple personnel and property ceased from AD 259. The collapse is truly startling. Perhaps it was more pronounced in Egypt, where municipal institutions were of more recent vintage, than in other parts of the empire, but the truth is that diligent efforts have yielded relatively meager evidence for the vitality of temple life elsewhere too. By any measure, the crisis of the third century was an unrestrained catastrophe for the traditional civic cults.74

It is important to ask why it was so. There was no such thing as a coherent "paganism," except in the mind of Christian polemicists. Ancient polytheism was diffuse. It was an ensemble of loosely interconnected religions, immanent in nature and ingrained in the life of the family and the city. The polytheism that flourished in the Roman Empire was built into the

vaulting social hierarchies of the ancient city. We meet the authentic paganism of the high empire not in high theological speculation but in the street life of the cities. A famous example is known from Ephesus, where a wealthy Ephesian citizen and Roman knight named C. Vibius Salutaris established an endowment in honor of the goddess Artemis. The interest from the endowment, maintained by the temple, funded magnificent religious pageants celebrating the long history of the Ephesians; effusive gifts of cash were given to the citizens along archaic tribal lines; blood sacrifices were made to the goddess. These religious endowments were utterly wiped out in the financial chaos. The old patterns of civic patronage were destabilized. The ancient gods did not lose out in a crisis of faith. They were embedded within an order whose foundation itself cracked.⁷⁵

The superstructure fell, but ancient polytheism hardly died out. The particulates of natural religion were everywhere. A traveler walking down a Roman road would see "an altar garlanded with flowers, a leaf-shaded grotto, an oak loaded with horns, a beech crowned with animal-skins, a sacred hillock within an enclosure, a tree-trunk with an image carved in it, a turf altar moistened with a libation, or a stone smeared with oil." No crisis could wash out the tenaciously rooted ground cover of folk polytheism. In the third century, the Christians remained surrounded by the sounds and smells of seething polytheism. But when the loftier expressions of public religious life faltered, the Christians seized the moment. The church inserted its voice obtrusively into the public conversation, in a way that even in the Severan period would have seemed almost impossible. The church was ready to talk terms with the empire. By the turn of the fourth century, the Christian community had become a force to be reckoned with. The barracks emperors vacillated between policies of eradication and cooptation, until the most successful among them pledged himself fully, and somewhat unexpectedly, as the protector and patron of the faithful. It was an age of bold strokes.76

THE ROAD TO RECOVERY

The emperor Aurelian (AD 270–75) reconquered the secessionist territories. He built walls around the city of Rome and attempted a thoroughgoing reform of the coinage. He insisted on the worship of *Sol invictus*, the unconquered Sun god, something of an outsider in the Mediterranean pantheon, but easily enough domesticated. He paraded the queen of Palmyra,

Zenobia, through the streets of Rome in the glorious rites of a Roman triumph and proclaimed himself the "restorer of the world."

In reality, his reign was a heady mix of old and new. The restorative work of the barracks emperors was carried out in the name of tradition. The success of their project has led modern historians to question even the reality of crisis. But we should not take it for granted that the Roman Empire would be reassembled into a unitary state with a pan-Mediterranean geographic framework. Han China did not survive its parallel crisis intact. The Roman Empire was given a second life, a fact which should cause us to marvel at the achievement of restoration, not to doubt the gravity of the crisis.⁷⁷

The empire's fortunes reached a low tide in the AD 260s. It was the demographic bottom too. Here the work of recovery was much slower. The Plague of Cyprian and the broader crisis were disorienting. Interior regions accustomed to peace were brutally violated; old social hierarchies buckled. Throughout the west, rural settlement patterns reveal a rift. Life returned, but slowly, and to a different, more wary rhythm. The cities were never quite the same; even the healthiest late antique cities were smaller than they had formerly been, and in aggregate, even after the recovery, there were simply fewer major towns. The old days when army recruitment could be handled with a light touch were forever gone. Late antique statecraft would have a harder edge, by necessity. But the project of restoration laid the groundwork for another century and a half of imperial integration and economic resurgence.

The long fourth century was, in its way, a new golden age, less brilliant than the Antonine efflorescence in material terms, but extraordinary by any other standard. Yet somewhere within the new equilibrium lurked the seeds of divergence between the eastern and western halves of the empire. The project of restoration led, eventually, to the establishment of a second Rome, at Constantinople. The foundation of the new capital was a stroke of genius that would shift the geopolitical balance, more profoundly than anyone could have imagined. When the hand of global climate change set off a chain reaction of people movements and refugee crises that realigned the pressures bearing on the edges of Roman territory, it would break the empire along the lines of stress that had slowly developed. Only half the empire would survive the next fall.⁷⁸