world's 2.6 billion Christians will be living in Latin America, with 623 million, and Africa, with 595 million. By 2050, Christianity will be primarily the religion of Africa and the African diaspora, Jenkins says.

For the foreseeable future, the "Southern" church will include millions of the poorest residents of the planet. "Northern" Christians have expected these new believers to be liberal, activist, or even revolutionary. But while many of the new converts do espouse liberation, Jenkins writes, they combine it with a concern with deliverance from supernatural evil, which can be manifested in sickness, wickedness, and compulsiveness. Although some European and American Christians

By 2025, a date less distant than the span of Pope John Paul II's reign, the largest groups of the world's 2.6 billion Christians will be living in Latin America.

accept theories of the diabolic and demonic, most reject them as irredeemably pre-scientific. But in the dominant churches of the future, prophecy will likely be an everyday reality, while faith healing, exorcism, and dream visions will all be fundamental parts of Christian religious sensibility. The new church will

also likely be more conservative morally and sexually than the Main Street churches of the North.

Many wonder if this form of "Southern" Christianity is Christianity at all, or a remnant of an older "animism" in which healing, visions, and prophecy are paramount. Jenkins suggests a different interpretation: African and Asian Christianity will be rooted in the Bible, particularly the stories of the Old Testament, with its tales of famine and pestilence, sacrificial lambs, and kinship responsibilities. "For better or worse," Jenkins concludes, "the dominant churches of the future could have much in common with those of medieval or early modern European times."

HISTORY

## Giraffes in a Coal Mine

THE SOURCE: "Audience for a Giraffe: European Expansionism and the Quest for the Exotic" by Erik Ringmar, in  $Journal\ of$ World History, Dec. 2006.

In the 15th century, when Europeans were creeping down the west coast of Africa in tiny ships in search of spices and gold, China's great eunuch admiral Zheng He had already visited Africa's east coast in ships five times as large. Before Columbus set out with 88 sailors on the voyage in which he would discover America, Zheng led nearly 28,000 men to trade with even more distant Mogadishu. Yet it was Europe, not China, that found and colonized the New World. Historians have always

attributed expansionism to an insatiable hunger for wealth, but the economic argument doesn't explain why the motivation was concentrated in the West. Erik Ringmar, a professor at Taiwan's National Chiao Tung University, finds a complementary explanation in an unlikely source: tales of pioneering giraffes.

Three rulers of dissimilar societies, republican Florence, imperial China, and Restoration France, were enthusiastic practitioners during the last millennium of the aristocratic hobby of rare animal collection. No species was more coveted than the tall, regal, and nearly silent giraffe.

The sultan of Egypt, seeking to

ingratiate himself with the city of Florence's first family, shrewdly gave Lorenzo de Medici a giraffe in 1486. It wandered along the city streets, raising its head to acknowledge admirers on buildings' second floors. It inspired poets and appeared in numerous versions of the The Gifts of the Magi-paintings of Oriental kings offering presents to the baby Jesus.

Crowds followed Lorenzo's giraffe, which was considered the very epitome of the exotic. They found it marvelous, and once they had seen such a creature, they wanted more. It was almost addictive, Ringmar writes. It was in keeping with this spirit of the city that within a dozen years of the giraffe's acquisition by Lorenzo, the Florentine explorer Amerigo Vespucci set off to explore the two continents that would bear his name. Nearly 350 years later, a new French king, Charles X, received his own giraffe from an Egyptian tomb robber and antiques dealer who was also seeking to gain influence. Charles X's situation was quite different from Lorenzo's. Charles was insecure, intent on restoring

the ideal ornament for a royal zoological park.

Giraffa arrived in Marseille in 1827, was outfitted with a blanket of golden fleurs-de-lis, and marched the 500-odd miles to Paris. Initially, just as in Florence, Giraffa mania set in, with a new commercial twist. Bakers members of the lower classes or "lesser races." The ability of the scientists to place the giraffe taxonomically was just another example, to the French, of their superiority to other cultures and peoples, and it was this sense of superiority that helped propel them to occupy Algeria three years later and to embark on other imperial ventures.

The Son of Heaven, Chinese emperor Yongle, acquired his giraffe secondhand. Admiral Zheng He accepted the creature as a gift to the emperor from the king of Bengal in 1414. Yongle's giraffe, called a girin in its native Kenya, caused a stir among the Beijing populace when it arrived, but it didn't faze his imperial staff. Chinese scholars, serving an empire around which they assumed all other nations circled in envious obscurity, were rarely unprepared. They determined that the girin must be a unicorn, or qilin, which was well documented in their encyclopedias as a mythological creature that had a horn, the body of a deer, the tail of an ox, and the hooves of a horse. It was a benevolent omen. The emperor called it a reward for the abundant virtue of his father, and a sign that it behooved him, even more than in the past, to cling to virtue. And virtue was a Chinese quality, not to be found among foreigners.

Although Zheng He was bringing back exotic wonders and establishing diplomatic relations with distant lands, his voyages were controversial within the Chinese court. In the end, writes Ringmar, the inward-looking Confucian literatiprevailed. Despite the excitement caused by the giraffe and the obvious benefits the Chinese derived



Ambassadors deferentially present gifts to Lorenzo the Magnificant while his prized giraffe towers majestically in this 1453 ceiling fresco by GiorgioVasari (1511–1574) in the Palazzo Vecchio in Florence.

France's absolute monarchy after the 1789 Revolution and Napoleon's wars. The giraffe, promptly classified by French scientists as a *Giraffa camelopardis*, appeared to be a sophisticated and aristocratic figure,

sold giraffe cookies, and giraffe spots appeared on wallpaper, crockery, soap and furniture. But the fad quickly passed. *Giraffa camelopardis* was a curious toy, the kind of strange beast that provided entertainment to the

from international trade, 19 years after the girin's arrival an imperial decree was issued limiting foreign trade and travel. As a Confucian official wrote, Zheng's expeditions "wasted tens of myriads of money and grain, and moreover the people who met their deaths on these expeditions may be counted by the myriads. Although he returned with wonderful precious things, what benefit was it to the state?" Five centuries would pass before

China began to emerge from its insularity.

The giraffe can be seen as a tall version of the canary in a coal mine: It was an early signal of change whose arrival provided an acute reading of the nation's outlook. The Chinese operated by allegory—the giraffe was a unicorn, which was a sign of heavenly favor, which could be sustained by uninterrupted allegiance to insular Confucian virtues. The Florentines used analogy: A prince who could produce awe-inspiring exotica would himself inspire awe, thus propelling the city into an ever-widening search for the novel and alluring. The French made sense of the world by scientific rationality and classification. French scientific superiority allowed them to classify every known creature and thing, which was beyond the power of the inferior societies they were born to rule.

## **SCIENCE & TECHNOLOGY**

## Athens on the Amazon

THE SOURCE: "Virginity Lost" by Fred Pearce, in Conservation, Jan.-March 2007.

FEW ENVIRONMENTAL CAUSES have attracted more passionate support than efforts to save the vast Amazon rainforest from development and deforestation. New research, however, suggests that the image of a primeval virgin Amazon is a modern myth. "Rather than wilderness," writes Fred Pearce, a British freelance writer and the author of Deep Jungle (2005), the Amazon's tropical rainforests are partly natural and partly "abandoned gardens."

In all probability, Pearce writes, "the Amazon was dotted with urban centers and crisscrossed with networks of causeways and irrigation canals at the same time [that] the Greek empire flourished in Europe."

The evidence for an urban and suburban Amazon basin began to pile up in the 1980s, when an

American oil prospector exploring the grassy lowlands of the Bolivian Amazon in a truck wondered why he was bouncing over corrugated terrain. Clark Erickson of the University of Pennsylvania subsequently found tens of thousands of kilometers of raised banks across the Bolivian Amazon that he believes were dug by humans. A horizontal equivalent of the vertical terraces of the ancient Near East, the corrugated ridges nourished plants and the depressions held water for irrigation. Erickson also discovered a 500-kilometer-square area of ponds and weirs used for fish farming. Archaeologist Anna Roosevelt of the Field Museum of Natural History in Chicago uncovered evidence in Ilha do Marajó, at the mouth of the Amazon, of thousand-year-old roads, drainage networks, and small cities of as many as 100,000 people. Further inland,

Michael Heckenberger of the University of Florida, Gainesville, discovered that the floor of one of the deepest, darkest areas of continuous tropical rainforest has not always been forest floor. Most of the supposedly virgin forest was cleared at least once, and perhaps several times, by the Xinguano people for farming-a millennium ago.

The early conquistadors found urban societies when they first floated down the Amazon, but the local civilizations seem to have collapsed shortly after the first contact with Europeans, perhaps destroyed by disease. Francisco de Orellana described a town at the entrance to the Rio Negro in 1542 "that stretched for 15 miles without any space from house to house." But knowledge of these cultures seems to have faded as survivors fled into the forests, and farmers, metalworkers, priests, and scholars became hunters and gatherers.

"The strange truth is that, by inadvertently wiping out the Indian populations, it was the Europeans who created the modern Amazon rainforest," Pearce writes.