History

SPACE BETWEEN WORDS: The Origins of Silent Reading. By Paul Saenger. Stanford Univ. Press. 480 pp. \$49.50

At the outbreak of World War II, the historian Lynn White, Jr., alerted his fellow medievalists to a curious fact. For all the otherworldly concerns of the people of the Middle Ages, they were generally better practical innovators than the ancient Greeks and Romans. Even the "Dark Ages" showed a steady advance over the Roman Empire, and 10th-century serfs lived better than the proletariate of Augustan Rome. Documenting the impressive accomplishments of medieval society in agriculture and mining, wind power and waterpower, shipbuilding and road construction, White and his successors have shown that medieval religion, far from inhibiting technological change, encouraged it in ways unthinkable in slaveholding antiquity.

In Space between Words, Saenger makes a richly learned contribution to our reinterpretation of medieval innovation. A curator of rare books and manuscripts as well as a historian, Saenger is equally at home in the arcane lexicon of paleography (the study of historical scripts), the daunting terminology of contemporary neuroscience, and the psychology of reading. His theme seems specialized and technical, but it is nothing less than the reinvention of reading: how the arrangement of letters on a page, and our techniques for interpreting them, began to take their present form well over a thousand years ago. Saenger does for medieval mental software what White and others did for the hardware of daily life, discovering that habits we take for granted were early and profound innovations.

Late Romans and the Church Fathers nearly always read aloud. They had to. They were interpreting highly inflected Latin, written without standardized word order and without breaks between words. Understanding a passage required *praelectio*, a spoken recitation. (Silent reading was apparently unusual enough to be noticed, and Saenger argues that it probably entailed mumbling rather than true silence anyway.) The goal of Roman literacy was not gathering information quickly from a text; it was giving an elegant oral performance, if only a private one.

Writing amid economic depression and

war, White recognized that vital innovations appear in times of crisis. Saenger's work confirms this insight. It was Irish and English monks during the troubled seventh and eighth centuries who first prepared manuscripts with a form of word spacing. Copying rapidly, as a present-day keyboard transcriber would, they established the first fixed sentence orders in Latin. Gradually they introduced new forms of books still used by countless readers: alphabetical glossaries, interlinear translations, pocket Gospels, and vernacular texts. In promoting sacred Latin texts to non-Latin speakers, they stimulated new reading habits, notably the ability to recognize entire words as patterns.

As word separation spread slowly through Europe, it changed culture subtly but powerfully, especially in the 12th and 13th centuries. Once inaudibility prevailed, authors' works grew more personal, private, occasionally erotic. Scholastic Latin, intended for silent analysis in larger units of thought rather than for declamation, valued clarity and precision over sonority. Mathematical notation grew more abstract, preparing the way for Arabic numerals. By the late Middle Ages, books were available on a scale unknown in antiquity, and university students were expected to bring copies of texts to their lectures and follow along silently. When librarians installed costly reference books, they chained them to tables (just as their successors safeguard computer equipment); in such close quarters, silence became the rule.

While admirers of McLuhanesque epigrams should look elsewhere, Saenger writes clearly and directly, and his insights into the cultural practices behind now-obscure scribal conventions enrich the archaeology of the written word. It is fitting that as some monastic orders take to the Internet, their early medieval predecessors emerge as pioneers of a first information age.

-Edward Tenner

THE LAST APOCALYPSE: Europe at the Year 1000 A.D. By James Reston, Jr.

Doubleday. 299 pp. \$24.95

In A.D. 1000, Otto III, the emperor of the Holy Roman Empire of the German Nation, paid a visit to Charlemagne's



tomb. Otto had Apocalypse on his mind, and, considering himself Emperor of the Last Days, he felt the need to pay tribute to the man who had established the Kingdom of Christ in Europe. To Otto, the end of the world, as predicted in the Bible, seemed to be at hand. Nations were at war, and royal courts were rife with corruption. The Holy See was a chaotic and debauched institution, and the population of once-glorious Rome had shriveled to some 50,000 souls. Plague was rampant, and a 30-year-old famine had driven many peasants to cannibalism. The great city of Constantinople had recently been ruled by an ugly, foul-smelling dwarf. Even Charlemagne's royal descendants-Charles the Bald, Charles the Fat, and Charles the Simple-had seemed to presage nothing but inevitable decline. Otto wanted to spruce things up, and so, after opening Charlemagne's tomb, he dressed the great king's 200-year-old corpse in white and ordered that it be given a manicure and a new gold nose. Charlemagne had to look just right for the Horsemen of the Apocalypse.

The Horsemen never came, of course, but Reston, a journalist and author, contends that there was indeed an apocalypse a thousand years ago, and that it came in the form of "a process rather than a cataclysm." Christian Europe early in the 10th century was threatened from all sides: Islamic Spain was ascendant, pagan Vikings were terrorizing the continent, and ruthless Magyar horsemen were arriving from the east. Yet by the end of the century, these threats had subsided and the borderlands of Europe had been securely Christianized, almost as if by magic. "No more dramatic change can be imagined," Reston argues. "Christianity in 999 A.D. represented civilization and learning and nationhood against the darkness of heathenism, illiteracy, and chaos."

In writing what he calls "a saga of the millennium a thousand years ago," the author paints surprisingly vivid pictures of such figures as Norway's Olaf Trygvesson, Denmark's Svein Forkbeard, England's Ethelred the Unready, Poland's Boleslav the Brave, Spain's Al-Mansor, France's Gerbert of Aurillac, Constantinople's Princess Theophano, and Germany's Otto III. Reston's goal is to tell the story of the "concatenation of [millennial Europe's] dramatic personalities and battles and social forces," and he does so admirably, even if his conclusions seem somewhat suspect at times. (Did the downfall of the Moors in Spain, for example, really represent the triumph of "learning" over "illiteracy?" Did the sudden Christianization of the edges of Europe *really* culminate "in peace and tranquility?")

Reston avoids drawing parallels between the end of the last millennium and the end of our own, but it's impossible not to find at least one lesson here. "In considering the millennium," he observes, "people are looking for apocalypse in the wrong place." Those expecting a cataclysm in 2000, in other words, are likely to be disappointed but the changes we're living through may prove every bit as apocalyptic as those of a thousand years ago.

-Toby Lester

RECONSTRUCTING AMERICA: The Symbol of America in Modern Thought.

By James W. Ceaser. Yale Univ. Press. 292 pp. \$30

"Men admired as profound philosophers," Alexander Hamilton observed in *The Federalist*, "have gravely asserted that all animals, and with them the human species, degenerate in America—that even dogs cease to bark after having breathed awhile in our atmosphere." Ceaser, a political scientist at the