founding of the city of Rome and of developments in the early "Regal" period (*c.* 750 to 509 BC) was undertaken. Test soundings indicated, for example, that soil, rock, and clay fill was used (around 625 BC) to raise the level of the Tiber basin for the creation of the Forum.

The British journal *Current Archaeology* (August 1989) contained a note on the "ink-leaf tablets" (letters written on slivers of wood) being recovered in great numbers at early forts on Hadrian's Wall in northern England. Many were official reports and daily rosters, but some were personal letters. When the tablets were all read and interpreted, much would be learned of life among the Roman forces on the empire's frontier.

Africa and the Far East. In southeastern Nigeria several varieties of alloyed bronze were identified on metal artifacts over a thousand years old, incorporating elements not used as alloys that early in Europe. The single available note from China concerned the identification of a date for an eclipse of the Sun, in 1302 BC, made from a study of tests on "oracle bones" by a modern astronomer. In recent years there had been a marked rise in archaeological activity in the island regions of southeastern Asia and the western Pacific. The journal *Antiquity* (September 1989) contained a special group of papers on the subject. Occupation was now known to reach back 40,000 years, and the making of pottery began at least 3,500 years ago in the Bismarck Archipelago, north and east of New Guinea. The pottery was an element of the "Lapita complex," and the question of who the people who made it were, how they got there, and where they came from would increasingly become a new focus of archaeological attention.

(ROBERT J. BRAIDWOOD)

Western Hemisphere. The year in New World archaeology was marked by major discoveries concerning the origins and demise of Mayan culture, the beginnings of ceramic technology in South America, and new evidence that early man may have migrated to North America much earlier than had been previously believed. Within the U.S. the most noteworthy archaeological developments involved major changes in policy and legislation relative to museum collections and Native American rights rather than any specific field discoveries.

In a landmark move with long-term implications for the practice of North American archaeology and anthropology, Robert McCormick Adams of the Smithsonian Institution negotiated a new policy that would result in the return of thousands of human remains to modern Native American tribal groups. In response to years of intense lobbying by Native Americans disturbed by what they perceived as the desecration of ancestral remains, the Smithsonian agreed that, after a grace period of several years to permit the inventory of its massive collection, it would begin the return of processed remains to members of surviving tribal groups. The move overturned years of opposition from archaeologists and museum administrators concerned over maintaining continued access to human skeletal collections for scientific study. It also went far beyond the more restrictive position put forth by the American Anthropological Association, which would have limited the return of burials to confirmed family members. The Smithsonian decision paved the way for similar policy shifts by other museums and universities, including Stanford University, the University of Nebraska, the American Museum of Natural History in New York City, and the University of Minnesota. It helped to defuse tensions over civil versus scientific rights and led to the introduction of a series of bills in the U.S. Congress aimed at providing greater protection for both archaeological and human remains.

In a related development, the state of New York agreed to transfer the traditional tribal wampum belts of the Iroquois League, some representing important treaty agreements dating to the colonial period when the Iroquois controlled much of the upper Hudson Valley and western New York. Some of the 12 belts had been stored underground in a vault of the State Education Building in Albany since the 1880s. Included with the collection was the important Hiawatha Belt made of strands of woven purple and white whelk shells, which commemorated the formation of the Iroquois Confederacy in the 15th century. Following a similar return of wampum to Canadian Iroquois by the Museum of the American Indian in New York City the year before, the transfer marked a significant shift in museum policy to include the return not only of ancestral human remains but also of important religious and spiritual objects of significance to Native American peoples today.

Archaeologists from the University of Oklahoma announced the excavation of what might be the earliest evidence for the presence of man in North America. Don Wycoff of the University of Oklahoma reported the recovery from an as yet undisclosed site in Oklahoma of two stone tools and flakes from tool manufacture, found in association with bison bones in apparently undisturbed sediments of a buried and filled-in ancient stream channel. Radiocarbon tests of charcoal and snail shells found with the remains yielded age estimates of 30,000 to 40,000 years before the present. If confirmed through additional research at the site, the finds would rekindle the heated debate over the antiquity of early man in North America. The initial radiocarbon age determinations predate by tens of thousands of years the scientifically accepted age of 11,000 to 11,500 years before the present for the fluted points of the Clovis cultures, taken by most archaeologists as the earliest accepted artifactual evidence for the appearance of early man in the New World.

The year was also highlighted by the announcement of

RUDY FREY—TIME MAGAZINE

Florence's Piazza della Signoria is torn up and closed off to visitors during an excavation by a team of Italian archaeologists. During the dig the archaeologists unearthed portions of a medieval city as well as artifacts dating as far back as the Bronze Age.

An antiquities inspector cleans a figure of Iunet, a goddess of ancient Egypt, which was uncovered at the temple at Luxor. An investigation of the effect of seepage from the Nile River and from Luxor's sewage system led to the discovery of a cache of ancient figures that included King Amenhotep III, who built the courtyard where the statues were found as well as the main portion of the temple.
AP/WIDE WORLD

significant new findings and insights into the origins and demise of Mayan civilization. In a major announcement, Richard Hansen of the Institute of Archaeology at the University of California at Los Angeles presented the initial excavation results at what might be the earliest Mayan centre yet discovered. Guided by air photo coverage dating to the 1930s, and following an initial survey of the site by Ian Graham of the University of Pennsylvania in 1962, the archaeological team cut their way through the jungles of northern Guatemala to the site, where they recorded the presence of a large stone pyramid and other temples, as well as an elaborately carved limestone slab. The slab depicted two "kings" in royal costume facing one another, with one of them pointing upward toward a deity. Known as Nakbe, the centre was radiocarbon dated to between 400 and 600 BC, and pottery found during the excavation paralleled ceramic styles known to date to 600 BC elsewhere in Mexico.

Dating to the middle Pre-Classic period in Mesoamerican archaeology, the centre was several hundred years earlier than El Mirador some 16 km (10 mi) away, previously thought to be the earliest Maya centre. The presence of temples and ceremonial structures at this early date indicates that planned urban centres and centralized political systems had emerged at a period when archaeologists thought the early Mayan settlements were limited to small village communities with low stone platforms for houses. The antiquity and sophistication of architecture at Nakbe provided strong evidence that Mayan society emerged earlier than previously thought and more in parallel with cultural developments elsewhere in Mexico, such as those at the Olmec centres in Veracruz and Oaxaca.

Following six years of fieldwork in the Petén, archaeologists under the direction of Arthur A. Demarest of Vanderbilt University, Nashville, Tenn., came forward with new evidence relative to the collapse of Classic Mayan society. From one Late Classic site dating to after AD 900, the previously known centre of Dos Pilas, the Vanderbilt team found the remains of plain pottery and common house sites surrounded by defensive walls, apparently built in haste; these contrasted with the more elaborate urban architectural facilities that characterized the earlier Classic Period phases at the same site. The team's data were fortified by the discovery of a second site, which remained unnamed to keep it safe from looters, belonging to the slightly earlier Classic Period and dating to c. AD 800. This second centre was built with extensive fortifications consisting of a defensive line of concentrically placed water-filled moats and backed by a massive stone wall on the inner perimeter. In a major reevaluation of traditional characterizations of Mayan society and the causes for its demise, Demarest used these two lines of evidence to argue that the end of the Mayans' social and economic power, and their political collapse, came about as a result of internal conflicts and internecine warfare rather than outside threats and attacks.

The jungles of Guatemala were the focus of archaeological concern because of the threat of intensive oil exploration in and around key archaeological sites in the heavily forested northern Petén. The confrontation over national patrimony versus economic development was particularly acute in this case. The exploration company, a subsidiary of Exxon, which had spent $21.4 million on initial tests, projected that the new wells would have made Guatemala completely self-sufficient in oil. Nevertheless, pressure from archaeologists and preservationists, who in some cases physically barred the drilling and survey crews from the ruins, brought a halt to the exploration. In August Exxon announced that it was abandoning plans for further drilling in this area of archaeological sensitivity.

Farther south, in the Andean region of South America, scientists reported some of the earliest traces of ceramic technology yet discovered in the New World. Using evidence of changing Pacific shorelines and sea level fluctuations, Jonathan Damp, formerly of the University of Calgary (Alta.), followed a hunch that if the coast is now more than a mile inland from former shoreline settlements with early pottery, even earlier sites might be discovered farther inland. Joint Equadorian and Chilean field teams excavated at the site of Alto Mayo, over 35 m (115 ft) above sea level and more than 4 km (2.5 mi) inland from the present shoreline. In the lowest levels of the excavation, they recovered several small burned clay objects

deeply buried below the levels containing Valdivia pottery, previously thought to represent the earliest evidence of ceramic technology along western South America. The ceramic pieces, which appeared to be both fired and molded, were radiocarbon dated to 6,000 years before the present. They appeared to represent the initial stages of New World ceramic development and added credence to the argument that this technology emerged locally in South America and not from Asia or Japan as a result of transpacific exchange.

(JOEL W. GROSSMAN)

See also Anthropology.

Architecture

In Britain architecture was frequently front-page news in 1989. This interest resulted from widespread publicity given since the mid-1980s to the various pronouncements of the Prince of Wales on architectural subjects. Architecture thus became a vibrant and important focus for debate, raising not only aesthetic but also social issues.

Prince Charles's encouragement of public debate on architecture began in 1984 when he spoke at the 150th anniversary celebration of the Royal Institute of British Architects at Hampton Court near London. He took that opportunity to attack specific projects then under discussion, including the proposed National Gallery extension in Trafalgar Square, which he likened in a famous simile to "a monstrous carbuncle on the face of a much loved and elegant friend." This speech provoked a dramatic public reaction, and eventually the proposals were scrapped. The prince also in that speech criticized the plan for the No. 1 Poultry site in the City of London, which at that time proposed an office tower block designed by Ludwig Mies van der Rohe.

Following the abandonment of the National Gallery proposals, the prince grew in confidence and enthusiasm for his subject and became more closely involved with current schemes. In September 1989 his book, *A Vision of Britain,* received a mixed reception from the public and the architectural profession. The prince set out therein ten principles that he believed should govern design. The lavishly illustrated book revealed that the prince's deep concern and sophisticated grasp of the subject was greater than some architects had realized. The book was launched in conjunction with an exhibition, also called "A Vision of Britain," at the Victoria and Albert Museum in South Kensington.

The ten principles set out by the prince included the requirements that buildings blend with their landscape and their size be in relation to their importance. Buildings should respond to human scale and be in tune with their neighbours, and a greater use of local materials was needed. The prince opined that modern buildings that lack decoration give "neither pleasure nor delight." Not all critics concurred with this view, but few would argue with the prince's view that the users of buildings should be more closely consulted by the designers.

A survey commissioned by the *Architects' Journal* showed that British architects did not uniformly agree with the prince. There was criticism of the prince's powerful influence on public opinion and local planning authorities. Some 41% of the architects surveyed believed that the prince was taking unfair advantage of his influence by expressing his views so publicly, though many others believed that he should continue to speak out about architecture, though not intervene in a manner that might influence planning.

There was wide disagreement with the prince's aesthe views. The prince is well known to favour a classical vival, while most modern architects prefer the "Moder Many disagreed that traditional or vernacular styles a materials were preferable to modern equivalents.

Commercial Buildings. Prince Charles's outspoken marks about architecture coincided with a major develo ment boom in London, particularly in the Docklands a to the east of the City of London. Many U.S. architectu firms were involved, and they may have been more acc tomed than their British counterparts to developments the scale being proposed and executed in the late 198 A number of buildings were for U.S. banking and mu national clients, and several of the major U.S. architectu firms set up London branches to serve them. The lead U.S. designer of office development in Britain was Sk more, Owings & Merrill, whose best-known commiss was the master plan of the Canary Wharf Developme Other U.S. designers involved in that project were sar Pelli, Kohn Pedersen Fox Associates, and I.M. & Partners. The development would eventually comp approximately 1.1 million sq m (12 million sq ft) of cilities. The design for the overall scheme featured th towers, shortened after objections by conservationists, was criticized by some as being unexciting. Prince Char speaking in a television documentary that he wrote narrated, said of the proposed Cesar Pelli Canary Wh tower, "I personally would go mad if I had to work i place like this."

Stylistic debate was not confined to Britain. In Janu 1989 the U.S. magazine *Progressive Architecture* repor that diversity was the only common thread in contem rary American architecture. Modernism had not died, had postmodernism turned out to be as transient as so of its early critics predicted. Diversity of opinion cha terized debates on architectural form and, in particu the degree to which architectural design should refe historic form and detail or, by contrast, create new fo and detail based on the technological and sociological c cepts unique to the late 20th century. Only buildings the highest quality (regardless of style and form) mer universal praise by architectural competition juries. So architects still worked in opposing philosophies, disp ing aspects of both modernism and postmodernism somehow drawing together superficially unrelated stra of design and philosophy. Most critics and architects, h ever, did agree that sensitive response to the environm was essential, only rarely to be subordinated to origi ity. Only architectural genius might occasionally justi building unfriendly to its context.

Rockefeller Plaza West by Kohn Pedersen Fox A ciates was a notable New York City high-rise pro situated on Seventh Avenue near the existing Rockefe Center. The 57-story skyscraper featured vertical limest strips, stainless steel and glass, and a stepped-back m structure topped by a modernistic penthouse area. bulk of the tower was broken by a glass 10-story-high tion at its southeastern corner. The building was pra for conforming with the spirit of its environment w showing imagination in its use of the stepped-back sec within an eroded corner. Inside, the building had colu free space and was technologically advanced while at same time echoing skyscrapers of the 1920s.

A design competition in Columbus, Ohio, for the Columbus Convention Center was won by Trott/Ei man, which had earlier been successful in a project the Ohio State University Visual Arts Center. The win design consisted of a series of narrow, twisting volu