

The main significance of these results lies not so much in the character of the finds on individual sites, as in the light thrown as a whole on the cultural sequences and affinities of north-western Honduras, and ultimately as a contribution towards the solution of the archaeological problem of Central America, more especially in the matter of cultural and ethnic origins.

In determining the sequence and chronological relation of the cultures revealed by the results of this archaeological reconnaissance, a point of departure is afforded by the excavations at Naco on the Chamelecon River, an important native settlement, also occupied for long by the Spaniards. Here in association with evidence of Late Nahuatl influence and a painted pottery culture were found two pieces of European pottery, of which, if one may have been a later intrusion, the other was probably contemporary with the early Spanish occupation.

From this point the cultures determined may be arranged in a chronological sequence as follows. First in the upper cultural level comes the Uluá Polychrome, comprising the domestic monochrome and two (or three) classes of painted ware, of which one, showing conventionalized human and animal forms, both from the character of the decorative motifs and the form of the vessels, is undoubtedly of Mayan derivation; and with this is the class, or classes, termed Bold Geometric and Bold Animalistic, the latter from Lake Yojoa, in which certain animal forms appear, but nevertheless to be associated closely with Bold Geometric. In both the Mayoid and the Geometric and Animalistic classes there is evidence of a lower and an upper type, indicated by a development

from a more naturalistic to a more highly conventionalized style, in which animal forms found in early Geometric disappear. The Mayoid pottery occurs in such quantity as to justify the inference that it is the product not merely of Mayan influence but also of an actual association of Mayan settlers with the makers of the Geometric and Animalistic classes, each group pursuing its own tradition. The Geometric of the Uluá River is attributed to the Jicaque, the Animalistic of Lake Yojoa to the related Lenca.

As connecting links between the Uluá Polychrome and the earlier culture of the lower level of Playa de los Muertos are placed tentatively the Uluá Bichrome from Santa Rita and the early painted ware, Playa de los Muertos Bichrome, between which there would appear to be some evidence of relation. The occurrence of Usulután ware in this level at Santa Rita is a link with Salvador, while the painted ware of Playa de los Muertos is referred to early levels at Uxactun. The early Playa de los Muertos culture from the lower level on this site, which precedes the sterile deposits, may itself be preceded by the apparently primitive Monochrome from Lake Yojoa—a point still to be determined.

As regards the absolute chronology of this series of cultures, it is suggested, not without reason, that the Uluá Polychrome represents a development which took place after the fall of Copán, where the dated monuments, according to one computation, come to an end at A.D. 800. The Mayan element in north-western Honduras, on this argument, would represent settlements made on the dispersal which followed the fall of the Mayan Old Empire.

Obituary Notices

Mr. A. J. Greenaway

JOHN GREENAWAY, for so he was known to his numerous friends, died after a long illness at Mill Hill on August 25. He was born at Islington on July 12, 1852, the youngest of four children and only son of John Greenaway (1816–90), well-known as a wood engraver and draughtsman from whom that great artist, Kate Greenaway (1846–1901)—the greatest and closest friend among many her brother ever possessed—derived her artistic inspiration.

After his early education at a local private school, Greenaway was apprenticed to his father, but later by his own wish he was allowed to study chemistry and entered the Royal College of Chemistry in Oxford Street, and was appointed demonstrator under Sir Edward Frankland when the College was transferred to South Kensington. Among his pupils during that

period (1872–81) were the late Profs. W. H. and A. G. Perkin, with whom Greenaway maintained lifelong and intimate friendships. In 1880, Greenaway became an abstractor for the Chemical Society, beginning an editorial connexion which lasted until his retirement in 1924. In 1885, he was appointed sub-editor in charge of the Abstracts, and after the death of his friend, Dr. J. C. Cain, in 1921, he became editor.

During the early part of his work for the Chemical Society, Greenaway lived with his sister, Kate, in the house at Frognal, Hampstead, which had been built for her. After her death, he went to live at The Orchard, Chertsey, which was owned by Miss Ethel Boyce, a well-known musician. Through most of his life, Greenaway knew intimately great artists and musicians, particularly friends of his sister.

Had it been possible for Greenaway to complete his chemistry training in Germany, as was then the custom, there is evidence that he might have become distinguished in his chosen profession. There is also evidence that had he not devoted his life to chemistry he might have become a distinguished artist. As it was, he was overburdened in his younger days with routine and irksome teaching from which he had to break away. In 1877, he published a paper, with the late R. J. Friswell, on thallos platinumocyanide, and in 1881, while still teaching, he translated and edited, with the late Prof. W. R. Hodgkinson, Wislicenus's "Short Text-book of Organic Chemistry". At a time when he must have been fully occupied with editorial work he edited in 1891 the translation of the fifth edition of Mendeléeff's "Principles of Chemistry"; he also edited with the present writer a volume of the Faraday Lectures for the Chemical Society and he wrote a charming personal account of his friend, Prof. W. H. Perkin, who died in 1929. Greenaway became a fellow of the Chemical Society in 1874 and was elected a vice-president in 1924. He was an original fellow of the Institute of Chemistry (1877).

For the Chemical Society, John Greenaway did outstanding and self-sacrificing work, and to him the Society must always be greatly indebted. He will long be remembered for his personal charm and modesty by many whom he taught to appreciate, as he did so intensely, beautiful things.

CHARLES S. GIBSON.

WE regret to announce the following deaths:

Prof. S. Alexander, O.M., F.B.A., honorary professor of philosophy in the University of Manchester, on September 13, aged seventy-nine years.

Dr. Charles Carpenter, C.B.E., formerly president of the South Metropolitan Gas Company, on September 7, aged eighty years.

M. de La Baume Pluvinel, member of the Section of Astronomy of the Paris Academy of Sciences, known for his solar researches and for numerous instrumental developments, on July 18, aged seventy-seven years.

Sir Basil Mott, C.B., F.R.S., president in 1924 of the Institution of Civil Engineers, on September 7, aged seventy-eight years.

News and Views

Herman Boerhaave (1668-1738)

HERMAN BOERHAAVE, eminent alike as physician, chemist and botanist, was born at Voorhuit, a village near Leyden, on December 31, 1668. He first intended to become a clergyman, like his father, and after studying philosophy, theology and mathematics, qualified as a doctor of philosophy at Leyden in 1690 with a thesis on the distinction between the mind and the body. He then took up medicine, in which he qualified in 1693 with a dissertation on the importance of examining the excreta in disease. In 1702 he was appointed lecturer in the institute of medicine, his inaugural address being devoted to the importance of the study of Hippocrates. In 1709 he was made professor of botany and medicine, and five years later succeeded Bidloo in the chair of practical medicine, becoming in the same year rector of the University of Leyden. In 1718 he became professor of chemistry, on which subject he published several works, the most notable being "Elementa chemiæ" (1724), regarded by Garrison as the best work on chemistry in the eighteenth century. His other principal works are "Institutiones medicæ" (1708) and "Aphorismi de cognoscendis et curandis morbis" (1709). Moreover, in conjunction with Albinus, the greatest contemporary anatomist, he edited the collected works of Vesalius. In addition to Peter the Great, he counted among his pupils such eminent physicians as Haller, Pringle, Cullen, De Haen and van Swieten, the last of whom published a commentary on the Aphorisms. Boerhaave enjoyed a world-wide reputation, and many of his

works were translated into different languages including Turkish and Chinese. His many honours included that of fellowship of the Royal Society and membership of the Academy of Sciences of France. His death took place on September 23, 1738.

Boerhaave Celebrations

THE Dutch Medical Association, the Leyden Faculty of Medicine and the Society of the History of Natural Sciences of Leyden are organizing a celebration beginning on September 23 to commemorate the two hundredth anniversary of the death of Herman Boerhaave. Visits will be paid to the old St. Cecilia Hospital, where Boerhaave gave clinical lectures, his country house "Poelgeest" near Leyden and the village of Hardewyk on the Zuyder Zee, the seat of the ancient university where Boerhaave presented his inaugural thesis on July 15, 1693. A commemoration volume will be published.

The Royal Flemish Academy, of Belgium

KING LEOPOLD OF BELGIUM has recently appointed the first thirty members of the Royal Flemish Academy of Belgium. The Academy comprises three classes: Sciences, Letters (including Political and Moral Sciences) and Fine Arts. A decree creating a Flemish Academy of Medicine may be expected to follow soon. This will form a complete equivalent of the old Académie Royale de Belgique, the official language of which is French. By thus putting both Academies on the same footing, instead of merely organizing a bilingual system within the Académie