bodies of the chiefs have been eviscerated they are interred within flat-topped pyramidal mounds, from the surface of which a shaft leads to the recess in which the body is placed. A dolmen is erected on the mound, by the side of which is placed an image in human form designed to receive the soul of the dead chief. These, together with other features, such as the belief in two souls, a cult of the sun with the idea of marriage with the sun, and a tradition of descent from an incestuous union, all connected especially with the chiefly clan, form a body of evidence which shows so many points of resemblance with ancient Egypt in detail that it cannot be neglected by the Egyptologist. It suggests that the rapidly increasing material provided by ethnographical research may help to elucidate some of his most difficult problems.

It was pointed out that it is only in such remote regions as Melanesia, which have not been overrun by later invasions, that we can expect to find survivals of the culture of early voyagers.

The relation between philology and ethnology was illustrated chiefly by reference to phonetics. It was pointed out that in such a region as Melanesia the philologist can now study living examples of transitions and interchanges for the existence of which in Europe his chief evidence is drawn from dead languages, impeded by the limitations which are the necessary result of fixation by means of writing. It was also shown by examples from Melanesia how features of grammar and syntax can be explained as the result of social interactions.

The present barren state of physical anthropology, in so far as it deals with living races, was ascribed to the neglect to utilise the findings of ethnology as working hypotheses and stimuli to new lines of research.

The address concluded with a consideration of the means whereby the Royal Anthropological Institute might promote the recognition of unity. It was pointed out that a scheme, already under consideration, whereby societies dealing with different aspects of human culture should be housed under one roof, with the common use of libraries and lecture-rooms, would contribute to this end; and it was suggested that the Institute itself might give much more attention than it does at present to papers and discussions which would bring out the common purpose of the more specialised studies.

Geology and the History of London.[1]

NUMEROUS small streams now "buried" under London are indicated on the new 6-in. Geological Survey Maps constructed by the author, and the historical research involved in tracing them has led to an appreciation of the connection between the geology and topography on one hand, and the original settlement and gradual growth of London on the other.

The reasons for the first selection of the site have been dealt with by several writers: below London the wide alluvial marshes formed an impassable obstacle; traffic from the Continent came by the ports of Kent, and, if destined for the north or east of Britain, sought the lowest possible crossing of the Thames. This was near old London Bridge, where the low-level gravel on the south and the Middle Terrace deposits on the north approached close to the river-bank. A settlement was obviously required here, and the northern side was chosen as the higher ground. The gravels provided a dry, healthy soil and an easily accessible water-supply; they crowned twin hills separated by the deep valley of the Walbrook, bounded on the east by the low ground near the Tower and the Lea with its marshes, and on the west by the steep descent to the Fleet; the site was, therefore, easily defensible. The river-face of the hills was, naturally, more abrupt than it is now, owing to the reclamation of ground from the river; the most ancient embankment lay 60 ft. north of the northern side of Thames Street.

The first definite evidence of a permanent settlement is the reference in Tacitus. The early Roman encampment lay east of the Walbrook, and the brick-earth on the west around St. Paul's was worked. Later the city expanded until the St. Paul's hill was included, the wall being built in the second half of the fourth century. The great Roman road from Kent (Watling Street) avoided London, and utilised the next ford upstream—at Westminster—on its way to Verulamium and the north-west. The earliest Westminster was a Roman settlement beside the ford, built on a small island of gravel and sand between two mouths of the Tyburn. This settlement could not grow, as did London, since the area of the island, known to the Saxons as Thorney, was small. The road from London to the west joined the St. Albans road at Hyde Park Corner, running along the "Strand," where the gravel came close to the river; a spring thrown out from this gravel by the London Clay was utilised for the Roman Bath in Strand Lane.

Throughout medieval times London was practically confined to the walled city, a defensible position being essential. The forests of the London-Clay belt on the north are indicated in Domesday Book and referred to by several writers, notably Fitzstephen, whose Chronicle also mentions many of the springs and wells and the marsh of Moorfields, produced largely by the damming of the Walbrook by the Wall. The same writer mentions that London and Westminster are "connected by a suburb." This was along the "Strand," and consisted first of great noblemen's houses facing the river and a row of cottages along the north side of the road; this link grew northwards, at first slowly, but in the second half of the seventeenth century with great rapidity. By the end of that period the whole of the area covered by the Middle-Terrace Gravel was built over, but the northern margin of the gravel was also that of the town for one hundred years, the London-Clay belt remaining unoccupied.

The reason for this arrested development was that the gravel provided the water-supply. In early days the City was dependent on many wells sunk through the gravel, some of which were famous, such as Clerkenwell, Holywell, and St. Clement's. In the same way the outlying hamlets (for instance, Putney, Roehampton, Clapham, Brixton, Ealing, Acton, Paddington, Kensington, Islington, etc.) started on the gravel, but later outgrew it. In the City the supply soon became inadequate, or, as Stow says, "decayed," and sundry means were adopted to supplement it. The conduit system, bringing water in pipes from distant springs, began in 1236; London Bridge Waterworks pumped water from the Thames by water-wheels from 1582 to 1817, while the New River was constructed in 1613, and is still in use. It was not until the nineteenth century that steam-pumps and iron pipes made it possible for the clay area to be occupied, thus linking together the various hamlets that now form the metropolitan boroughs of Greater London.

[1] From a lecture delivered before the Geological Society of London on February 1 by C. E. N. Bromehead.