ARCHAEOLOGY

Ancestry of the Alphabet Traced to New Source

THE REVOLUTIONARY verdict that we inherit our ABC's from a little-known people of northern Syria—not from the famous Phoenicians of Syria—is announced by Dr. Julius J. Obermann, professor of Semitics at Yale University.

His discoveries, which contradict the familiar school book lesson that our alphabet is traced back through the Greeks to the Phoenicians, were reported before a joint session of the Yale Classical Club and the Linguistic Club.

Dr. Obermann obtained his evidence by study of cuneiform alphabet writings on clay tablets unearthed six years ago at Ras Shamra in Syria.

Ancient Greeks themselves gave the world the impression—wrongly, Dr. Obermann considers—that their alphabet came from the Phoenicians in Syria. The theory has persisted throughout history because no one knew of any other alphabet system Greeks could have borrowed. The Ras Shamra discoveries reveal a people who had an alphabet made by impressing wedge-shaped or cuneiform symbols in clay, as early as the second millennium before Christ. Dr. Obermann's study of this alphabet shows significant links relating it to the Greek alphabet by ancestry.

The Greeks, he explains, borrowed an archaic form of this Semitic alphabet and preserved it. Meanwhile, the Semitic alphabet changed and developed in its home country and evolved into the form used by the Phoenicians, the Moabites, and the Hebrews.

Tracing the alphabet to Ras Shamra ancestry dissolves difficulties that have perplexed alphabet historians. As an example, Dr. Obermann cited the point that Greeks employed many more symbols than Phoenicians did in their alphabet. How to account for the so-called non-Phoenician elements was a problem. But, he said, these elements can be shown "one and all to be present in the cuneiform alphabet from Ras Shamra."

Another discrepancy in efforts to link the Phoenician with the Greek alphabet was the fact that Greeks used more alphabet symbols for phonetic values than Phoenicians did. Such discrepancies in function disappear when the Greek is compared to the Semitic writings from Ras Shamra, he stated.

The tablets preserving the long-lost cuneiform alphabet of Ras Shamra are the sacred literature of a Semitic kingdom known to have flourished in Syria in the north of the land of Canaan. Ras Shamra stands where the kingdom had its ancient center.

In adapting the cuneiform characters impressed into soft clay to a technique of writing with a blunt instrument on a hard surface, the Greeks, and the Phoenicians as well, made certain necessary changes, now explained.

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MEDICINE

Connection Found Between Vitamin and Poison Protection

A CONNECTION between vitamin A and a mechanism for protecting the body from poisons is suggested by experiments reported by Dr. Ira A. Manville of the University of Oregon Medical School. (*Science*, Jan. 9.)

One of the signs of vitamin A deficiency is damage to mucous tissues such as line the inside of the eyelids. The same sort of change, Dr. Manville finds, occurs in the mucous lining of the digestive tract when vitamin A is lacking in the diet. There is an actual decrease in the mucus-secreting cells, and the stomach and other parts of the digestive tract are consequently more easily injured, with ulcers and erosions resulting.

Mucin, which protects the lining of the stomach, has for one portion of its molecule a substance called glycuronic acid. This acid helps the body get rid of certain kinds of poisons by a chemical process of detoxification. The body gets its supply of the acid from food and from its own protein building blocks. When there is poison in the body, all available glycuronic acid will be used to detoxify the poison, and if the food source of the acid is low, none of the acid will be left over for mucin production. This leaves the stomach and digestive tract unprotected.

Animals deprived of a food source of glycuronic acid and given menthol soon showed signs of poisoning, Dr. Manville found Those animals which survived the poisoning for two to four days were examined after death and found to have ulcers in the stomach, gall bladder, pylorus and both large and small intestines. These ulcers resembled markedly those occurring in vitamin A deficiency.

Liver Affected

Glycuronic acid does its detoxifying job in the liver, so any damage to that organ will predispose to an earlier appearance of damage to the mucous surfaces, Dr. Manville points out. He believes that vitamin A is involved in this mechanism, but the exact connection between the vitamin and the detoxifying acid and the development of ulcers cannot be explained without further investigations.

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MAKING JOJOBA OIL

Dr. Robert S. McKinney, U. S. Department of Agriculture caught in action in his laboratory making oil from the jojoba nut seeds such as those shown on the facing page.