## Archaeology Today

## A New Look At Prehistoric Europe

by: Phyllis Young Forsyth

Generations of students in the past have learned to regard the ancient Near East as the "cradle of civilization". Standard textbooks have eloquently stated that civilization first arose in the area bounded by the Nile and the Tigris-Euphrates rivers, and then, from this single point of origin, gradually spread out into prehistoric Europe. This concept, usually known as the "Diffusion Theory" of civilization, has resulted in a rather condescending attitude towards the prehistory of Western Europe: for example, we are told that Stonehenge in England must have been built by Mycenaeans from Greece, that megalithic tombs in Ireland and Scotland were copies of Mycenaean tombs, or that Mycenaeans were responsible for rock carvings on Malta. The prehistoric Europeans evidently could do little for themselves, entrusting everything important to peripatetic Mycenaean Greeks.

Unfortunately for "diffusionists" this view is now under serious attack. The challenge has come from new scientific methods of dating which have developed in recent years, specifically from radiocarbon dating and dendrochronology. Briefly stated, radiocarbon dating is based on the fact that all living organic material contains Carbon 14 (radiocarbon) which decays at a known rate; measurement of the amount of Carbon 14 in a given object can provide the number of years since the "death" of that object. Dendrochronology, or dating by means of growth-rings in trees, has proved to be a most valuable aid in radiocarbon dating, since the growth rings of very old trees can furnish records of the amount of Carbon 14 in the atmosphere at different periods. Bristlecone pines, for example, can live for over 4000 years, and each growth ring tells us how much Carbon 14 was in the atmosphere when the ring was formed. Used together, radiocarbon dating and dendrochronology thus provide reasonably accurate dates for prehistoric material.

The application of these two dating methods to prehistoric Europe has now yielded startling results: some European monuments seem to be much older than has previously been thought possible. Stonehenge, for example, is now dated to c. 2600 B.C., long before any Mycenaeans were even in Greece (the "diffusionist" date for Stonehenge has traditionally been 1600 B.C.); temples on Malta are now dated back to the third millennium B.C., thus predating the pyramids of Egypt. Metals are now known to have been in use in Europe earlier than previously believed. As a result, it is becoming clear that "civilization" began in Western Europe much earlier than the traditional textbook dates to which we have grown accustomed.

Thus the prehistory of Europe needs new attention, and, indeed, the entire diffusionist view of civilization needs a more critical examination. Clearly, megalithic cultures in Western Europe were quite sophisticated and did not simply arise as a result of contact with Eastern cultures of a more advanced nature (see, for example, the fascinating book by Colin Renfrew, entitled Before Civilization: The Radiocarbon Revolution and Prehistoric Europe). It would now seem probable that, far from having one single source, "civilization" had several "cradles": advances were apparently made independently by different peoples in different areas. The time has come to make amends to the megalithic peoples of Europe, and to give them credit for the civilizations they built.