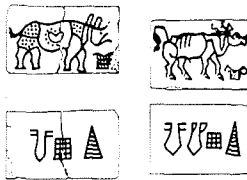
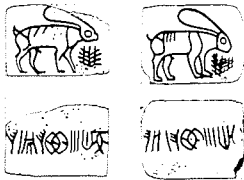


*Science & Technology***ARCHAEOLOGY & LANGUAGE:****The Puzzle of Indo-European Origins**

by Colin Renfrew
Cambridge, 1988
346 pp. \$29.95



The links between the various tongues of Europe and the languages of India are a mystery. After all, as Cambridge archaeologist Renfrew notes, "between Europe and Iran and India lies a great tract of land where very different languages are spoken." According to linguistic orthodoxy, Proto-Indo-European, ancestor of such modern languages as English and Hindi, was spoken by the seminomadic Kurgan people living around 4000 B.C. in the steppe region of southern Russia. Around 3500 B.C., these warlike nomads conquered the Danube valley and also began moving southward, ultimately conquering the Indus valley in what is now India; from the Danube, the proto-language, or *Ursprache*, was carried farther west by such tribes as the Germans and the Celts.

Renfrew comes up with a different scenario. Combining linguistic theories and archaeological evidence, he places the homeland of the first speakers of Proto-Indo-European in eastern Anatolia (modern Turkey) at roughly 7000 B.C. Neither bellicose nor rootless, Renfrew's *Ursprache*-speakers were peasant farmers whose moves proceeded at the pace of a few kilometers per generation. Advances in agricultural technology led to population growth, which in turn extended the frontiers of farming and Proto-Indo-European. The *Ursprache* may have diversified during the movement period or later.

Renfrew's hypothesis offers what the old one lacked: a plausible reason for the movement of the Proto-Indo-European speakers. Renfrew is confident, too, that the synthesis of linguistics and archaeology will yield more information about the origins of specific language groups and "about the time when the linguistic and conceptual abilities of fully modern man made their appearance."

FEARFUL SYMMETRY:**The Search for Beauty in Modern Physics**

by A. Zee
Macmillan, 1987
322 pp. \$25

If we observed the universe by looking at its reflection in a mirror, would we arrive at the same laws of physics? If so, the universe would be "reflection invariant." Similarly, does all physics have "rotational symmetry," or is there a preferred direction in the universe?

Following in the footsteps of Albert Einstein, contemporary physicists, including author Zee of the University of California, Santa Barbara, are