Linguists Search for the Mother Tongue

By using techniques of comparison some linguists believe it possible to reconstruct ancient languages

THE NOTION OF DISCOVERING—or rather, reconstructing—a language that has not existed for some 100,000 years might seem far-fetched in the extreme. But this is precisely what a small coterie of historical linguists hope one day will be possible. "Recovering ancestral languages spoken in the remote past will give us the key to many central issues about the origin, development, and diffusion of people, cultures, and humankind itself," says Vitaly Shevoroshkin of the University of Michigan.

Shevoroshkin recently hosted a gathering* of historical linguists who, among other things, addressed this issue of deep reconstruction. "You could call it 'In search of the Mother Tongue'," says Shevoroshkin. One participant admitted that many of his professional colleagues thought he must be crazy to be associated with such a pursuit. But most of those who attended the meeting came away convinced that some degree of historical perspective is indeed possible, even if 100,000 years might be a little optimistic. "The meeting has changed the dynamic of the field," comments Alexis Manaster-Ramer of Wayne State University.

All linguists know that languages change through time, through "mutation" of words and grammar, through word loss, and through addition of words and sounds from other languages. As Vjaceslav Ivanov of the U.S.S.R. Academy of Sciences put it: "Modern languages are tapestries of elements from the past and present." Where linguists disagree, however, is on the importance of this historical dimension.

For instance, some scholars suggest that given the common neurological substructure to language, any influence that historical descent may have on a language is trivial in relation to understanding linguistic mechanisms. Others, however, not only see significant mechanistic information to be gained from a historical perspective of language change, but also argue that an insight into the patterns of relatedness among modern and former languages is valuable in itself. This second group—the historical linguists—is a minority among academic linguists, particularly in the United States.

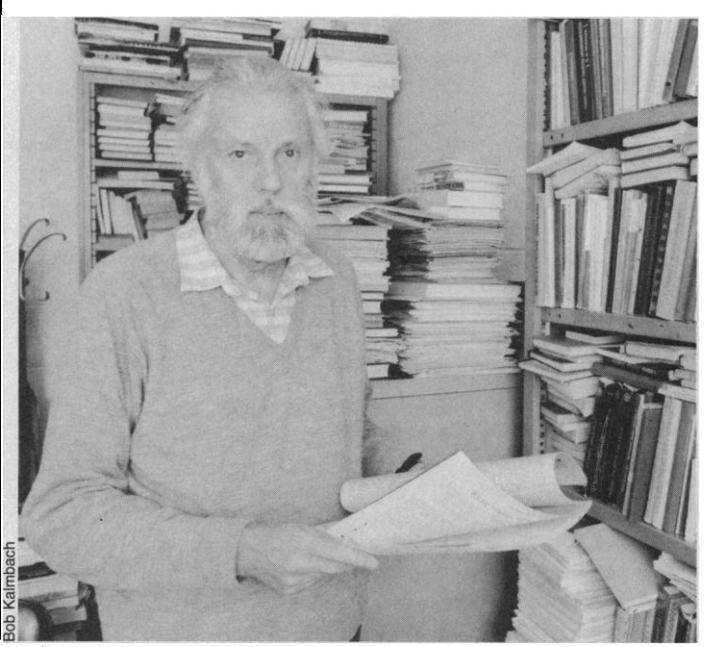
Even among historical linguists there are widely divergent opinions on how far into the past it is possible to delve, and still come up with something that is not totally illusory. Because languages apparently change rather rapidly, 5000 years is an absolute limit for some researchers. For others, the Mother Tongue of 100,000 years ago is accessible, albeit extremely indirectly.

Historical linguistics traces its roots back just two centuries, to an English judge in colonial India. The judge, Sir William Jones, had embarked on a study of the ancient language of Sanskrit, and began to see resemblances not only with Latin and Ancient Greek, but also with languages of northern Europe, specifically Gothic (the ancestor of German) and Celtic. In a lecture in 1786 Jones proposed that the resemblances were to be explained by common descent.

The idea of relationships among languages was not novel with Jones' suggestion. For instance, the commonalities among many European languages, and their link with Latin, were plain to see. But by proposing relationships between some of the languages of Europe and those of the East (Sanskrit was recognized as being ancestral to Hindi and many languages of India), the geographical and temporal scope was vastly extended. Explaining the history of this language family—called Indo-European—became something of an industry among linguists and archeologists, debates about which continue to this day.

During the 19th century, linguists began to do more than merely identify evolutionary relationships among existing and recent languages. They attempted to reconstruct languages for which there is no written record, by looking for commonalities among putative daughter languages: words or parts of words that were found to be common among daughter languages could be inferred to have been inherited directly from the parent language. Specifically, the idea was to reconstruct the Indo-European language, which was inferred to have been spread from a small geographical locality, perhaps Anatolia, beginning some 7000 years ago.

Language reconstruction fell into academic disfavor around the turn of the century, and remains very much a minority pursuit. Nevertheless, the lessons learned in the study of Indo-European sowed the seeds of bolder thoughts. Specifically, it was reasoned that other modern languages must belong to language families similar to Indo-European. And that these language families themselves would be found to be the daughters of earlier superfamilies. Ultimately, all existing languages would be traceable to a single Mother Tongue: in other words, monogenesis of human language. Not a popular notion.



Bob Kalmbach

Vitaly Shevoroshkin. *"Recovering ancestral languages spoken in the remote past will give us the key to many central issues about the origin, development, and diffusion of people, cultures, and humankind itself."*

*"Language and prehistory," Ann Arbor, Michigan, 8 to 12 November 1988.

"The [majority] linguistic approach is in practice, if not in theory, pre-Darwinian in that dozens, or even hundreds of linguistic taxa are treated *as if* they were historically independent developments," Merritt Ruhlen observed recently. "I believe the general rejection of attempts to connect Indo-European with other families has effectively blocked consideration of the question of monogenesis by acting as a dike against *all* long-range comparison." To be fair, it should be noted that many linguists believe that monogenesis may well be true, but is unprovable because of the rate at which historical traces fade.

But long-range comparison and deep reconstruction was kept alive, mainly by a small group of scholars in Russia. During the late 1950s and early 1960s Vladislav Markovic Illic-Svityc and Aaron Dolgopolsky were working independently in Moscow, attempting to reconstruct the superfamily to which Indo-European and other major language families belonged. When they eventually became aware of each other's efforts, they discovered a remarkable overlap in their reconstruction, which they named Nostratic, which means "our language."

Illic-Svityc was killed in an automobile accident in 1966, at the age of 32. Dolgopolsky continued the work, joined by a number of scholars, including Shevoroshkin. Dolgopolsky subsequently emigrated to Israel and Shevoroshkin to the United States, leaving the center of gravity of the work in Russia but taking with them satellites of activity. The recent conference was the first time that these Nostratic scholars have been brought together, and it was the first opportunity for many American researchers to scrutinize the fruits of deep reconstruction.

There are many direct similarities between language change and genetic change through time, as the University of Michigan's William Croft pointed out at the recent meeting. Divergence between isolated populations through time is a key analogy, as is the importance of innovations in identifying linkages between languages/species. But there are differences too, not least of which is that although it is sometimes difficult to define and delimit a species, the problem with a language is so much greater: languages are in a state of *continuous* change, so much so that some philosophers would argue that there are no discrete languages, just continua through time and space.

The most important practical difference between language change and genetic change, however, is the phenomenon of borrowing. In genetics, borrowing would constitute the passing of genes and genetic elements among unrelated species: although it occurs under special circumstances, it is rare. Borrowing of words among different languages, however, is extremely common. For instance, the many similarities between English and French words are superficial, the result of recent borrowing. English is a Germanic language and French a Romance language, both of which are subfamilies of Indo-European. The point here is that in scrutinizing languages either for making classifications or for reconstructions, borrowed words and sounds represent potential snares.

When biologists make reconstructions of extinct organisms they are guided both by knowledge of existing organisms and relevant fossils. For linguists engaged in language reconstruction, the only fossils available are writing, which represents a very limited glimpse into the past. The most ancient writing comes from Mesapotamia, and dates to just 6000 years ago. In Italy, this transition from prehistory to history was some 2700 years ago. And in the Americas, just four centuries ago.

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For the most part, therefore, language reconstruction involves creating the equivalent of fossils. As one reaches further and further back into the past, very quickly one finds that reconstructed languages are themselves based on other reconstructed languages. It is this distancing from anything concrete that makes many observers of deep reconstruction more than a little nervous about the security of it all.

In reconstructing a language, linguists build dictionaries (albeit rather limited), word fragments, etymologies, sounds, and a notion of grammar. The reconstruction necessarily is rather uniform and therefore not a language as it would be spoken in the real world. As University of Michigan linguist Ernst Pulgram pointed out, "You always have differentiation within a language—geographic differentiation and social differentiation." In fact, he added, most reconstructions are "atopic, achronic, and aphonic." In other words, one does not know where they were spoken, when they were spoken, nor exactly what they sounded like. At best, reconstructions represent abstractions of past languages.

At present, Indo-European probably represents the most thoroughly established family and reconstructed language (Proto-Indo-European), spoken about 7000 years ago. Illic-Svityc and Dolgopolsky's 1964 proposal for the Nostratic superfamily included several other language families equivalent to Indo-European: these were Afro-Asiatic, Kartvelian, Uralic, Altaic, and Dravidian. (Other language families have been added to Nostratic in more recent times.) The Nostratic proto-proto-language was spoken, scholars estimate, some 15,000 years ago, and so far the reconstructed lexicon contains some 1000 words.

During the past 20 years at least two more superfamilies have been identified, one by Russian scholars the other by an American, Joseph Greenberg of Stanford University. The first of these other superfamilies, known as Dene-Caucasian, includes a number of Eurasian language families, such as Sino-Tibetan, Yeniseian, and Eyak-Athapascan. As a product of the Russian school, the Dene-Caucasian proto-language has been partially reconstructed. By contrast, the second additional superfamily, Amerind, has not been reconstructed to any great extent, merely classified.

Greenberg uses a technique he calls mass comparisons, which is very much as it sounds. He examines hundreds of words from many languages, and seeks similarities, which he considers indicate common descent. As a result, he suggests that most of the 1000 languages of the Americas belong to one family, Amerind, a proposal that has provoked vigorous criticism from U.S. linguists. Nevertheless, Greenberg is confident that his classification will be vindicated, just as his proposals were for African language classification two decades age.

In addition to Nostratic, Dene-Caucasian, and Amerind, there are probably two more superfamilies—covering languages of South East Asia, the South Pacific, and Africa—but the evidence here is weaker. As Manaster-Ramer points out, the validity of a language superfamily is best tested by the ability to exclude languages from it. "With Nostratic and Dene-Caucasian you can show that languages do *not* belong in them," he says, "but with Amerind it is more difficult, because it is less well defined."

Historical linguists clearly face many challenges, quite apart from criticism from the more orthodox body of their profession. The issues include trying to devise ways of measuring the rate of language change, and establishing more links with archeologists, so that, together, the two bodies of data might be even more informative of historical processes. The Ann Arbor meeting was important in this respect because, as stated by Roger Wescott of the University of Tennessee: "It gave us a sense of no longer being isolated." ■ **ROGER LEWIN**