

THE ORIGIN OF LANGUAGES

Dear Editor,

A correspondent whose letter was published in the **CEN Tech. J.**, 9(2)/ suggested that someone should write on the above topic, so here goes.

The problem is, however, that nobody knows any details about the origin of languages. The Bible merely tells us that the multiplicity of languages began at Babel. The date, using Scriptural dating, works out at about 2200 BC. And as to the origin of language itself, it's obvious from Genesis 2:16-17 that Adam was created with an understanding of language, and from Genesis 3:2 that Eve could talk.

Studying Language

Linguists have always held that understanding of language precedes its use by humans, and indeed this is obvious to most parents. Children understand a great deal more than they can express. Psycholinguists have made this a basic assumption in their experiments on the development of language in the child, and so far nothing has appeared to contradict the assumption.

I have always regarded language as a sort of permanent miracle. How is it that messages can travel by means of slight oral and pharyngeal muscular movements in one person disturbing air waves in such a way as to vibrate mechanisms in the ear of another, let alone the mental assessments which accompany these physical events and so bring understanding in the brain?

Yet such is the method God placed in us for our communication with each other. Our communication with Him is even more remarkable, since it can occur without perceptible physical accompaniments.

Language itself, then, is a created means of communication. God also caused selected humans to employ a

more permanent means of communication involving the transfer of speech to writing, and this is a further miracle. Only in the present age of audio- and videotapes do we have new methods of communicating without direct writing and reading skills being involved. In that sense we live in a different world from that of all our ancestors. One wonders whether this fact itself suggests that we are in the last times, when the scroll and the book seem likely to be superseded.²

As might be expected, people all learned to speak the same language.³ Thus, although God had created Adam and Eve with language already acquired, their descendants all had to learn it as infants. Much of the present century has been spent on linguistic research into this learning process, some since Chomsky⁴ noting that all normal children begin to speak at roughly the same age, and therefore there must be more to it than mere imitation of the parent. Some of the process is regarded as innate.

From the 1920s psycholinguists noted that children typically make errors in their mother tongue in a predictable direction. They generalise grammatical structures and fail to observe exceptions. This means that they have grasped a general rule, which then takes precedence over imitation of single hearings of the exceptions.

It's probably true, as Crystal says, that *'the further back one [goes] in reconstruction, the more complex the inflections of language [appear] to be.'*⁵ It is therefore incorrect to say that older languages are 'more primitive'. Such terminology in any case is irrelevant when comparing languages over time.

During the nineteenth century what was then called 'philology' majored on origins of words (etymology) in trying to trace genetic relations between languages. Later, different approaches were taken, and typological similarities

were noted, with grammar rather than lexical features becoming the centre of study.

At the beginning of the twentieth century the emphasis swung away from the historical approach to languages, and with Saussure, the 'father' of modern linguistics, almost all studies were concerned with 'states of language', with interest primarily in 'synchronic' rather than the old 'diachronic' or historical studies.

It's only recently that 'historical linguistics' has come back into fashion, though there is still very little interest in origins. It may be that some scholars are fearful of a return to what was originally a biblical approach, either through antipathy or a failure to take the biblical record seriously.

The Original Language

However, it may be possible to make some well-founded statements about the origins of language and of languages. In respect of the former, the Bible is really our only source of knowledge. Besides what we read overtly from the text, it is also possible to draw conclusions. Though we are told there was one single language before Babel, can we know anything about it? I submit that we can deduce a possibility that it could have been Hebrew, or at least some language capable of being translated into Hebrew without loss of meaning.

To support this contention I would point to the record of three names in Genesis 4:20-22. There we read of three men in one family, Jabal, Jubal and Tubal-Cain. All three names come from one Hebrew verb-root, *jabal*. Now it's well known that words related phonologically are seldom translatable into other languages while retaining their semantic connections. This makes it unlikely that the original language was other than Hebrew.

However, it's doubtful whether the original would have been written in Hebrew script. That is, if we subscribe

to the view that the original was written before the Flood of Noah.⁶ The earliest alphabetic script known was discovered in the Sinai Peninsula and is dated about 1450 BC.⁷ It's still possible, of course, that the semantic connections could have been in the script, so that the original language did not have to be Hebrew.

But whatever it was, it must have been destroyed at Babel. As for what happened during the Babel event, many theories have been offered.⁸ Hence, we can no longer speak of one single origin through evolutionary processes for our present array of languages. Clearly the biblical account implies a number of starting forms of speech, even though the number would almost certainly have been relatively small. Today's 5,000 or so 'languages' would have come from this original set by a process we could call 'micro-evolution'. For those who dislike any association with the word 'evolution', we could use the linguistic term 'variation'.

How Many Languages?

How far back, then, can we trace this variation? Can we at least state how many original languages God created or allowed? First, we need to free the mind from prejudice, including the over-statement of anti-evolutionary claims. Thus the letter-writer of paragraph one was apparently disappointed with Elizabeth East for *'speak[ing] of the Indo-European language as if it is factual'*. But surely that's guilt by association, for he gives as reason that *'evolutionist theory has little or nothing in common with the statements of Genesis chapter 10'*.⁹ I see this attitude similar to that of those who reject the Trinity on the basis that Roman Catholics, whom they dislike, believe in it.

The idea of a proto-Indo-European ancestor to languages as disparate as English and ancient Hittite date well before Darwin's influence outside biology. Though we cannot state precise details of 'Indo-European', it is indeed a fact that the vocabularies of a large number of European and West Asian languages are so similar that a

relationship must be postulated if we are to get anywhere in studies of the origin of languages. The earliest presuppositions were based on genetic linguistic criteria.

It may be that genetic similarities are less important than typological considerations. In typology, languages have been compared along a cline from isolating to inflectional (analytic to synthetic), which makes English closer to Chinese than it is to German. However, such considerations, though important for language teaching, are not likely to be realistic in terms of language spread throughout the world. Of more significance in this field is Brosnahan's theory of areal linguistics, which explores similarities in border areas between genetically unrelated languages. Similarities are both phonetic and semantic.

Chronological changes in relationships between languages must therefore be studied on a broad basis, taking into account 'borrowings', which is the linguist's euphemistic term for the taking of words and/or sounds from one language to another. Lexis and phonology are hardly 'borrowed', for this would mean they would eventually be surrendered and returned!

But as regards the main changes down the ages since Babel, we could say that some dozen or so languages have now become 5,000 or so today. However, here we meet another problem. What is a language? Recent interest in language variation has included the definition of speech forms at four levels: language, dialect, accent and idiolect.

These terms are now applied more rigorously by linguists. For example, a linguist would say that Cantonese and Mandarin are not two dialects, but two languages. The criterion is spoken interintelligibility. True, these two speech forms use a common script, but the reality is that without pen and paper, intercommunication is opaque. However, with a true dialect, communication is possible, though vocabulary and grammar may differ.

As between dialect and accent, the understood difference is that speakers

of different dialects use different lexical items and usually different phonetic forms, whereas speakers of different accents in a language differ only in their phonetic correspondences.

'Idiolect' refers to an individual's speech-form. This term can be ignored when considering language change over time. And in our particular study, we are really concerned only with languages. At what point do groups of people cease to be interintelligible? The problem is compounded by the fact that people groups may understand each other from group A to group B but not from group B to group A. In such cases linguists would still tend to regard them as speaking the same language.

Such criteria would then reduce our 5,000 'languages' to more like a few hundred. Even this number shows a remarkable diversity. But we must remember that we today would not understand our ancestors of a millennium ago, when there was no 'English language' but only groups speaking 'Anglo-Saxon' and 'Norman French'. English is historically a 'pidgin' composed of a basic Germanic grammar with a Latinate lexis superimposed.

History of Languages

The history of languages is no easy matter to research. But it does seem that some statements are possible, based on known language relationships in 'language families'. At this point, if we wish to estimate the number of languages God caused to appear at Babel, we must use as a guideline the present-day estimated number of families.

It appears that Cavalli-Sforza *et al.* have identified some 16 'phyla', or what previous linguists have called 'families'.¹⁰ This would appear to fit a population emanating from eight people about a hundred years earlier. It would represent a reasonably high rate of population growth.

I go along with East's general thesis, except for one suggestion that creationist linguists would assume that *'present day languages are derived from an original language'*.¹¹ This

assumption appears to me to insufficiently account for the 'confusion' introduced in judgment by God at Babel. As stated above, one language, Hebrew, might have survived. But in any case, the great majority of languages would be unrelated to whatever language was used before Babel.

As I have indicated elsewhere,¹² it seems clear from Scripture that God confused the languages before He scattered the population. Thus the confusion would not be a result of the scattering, but a sovereign work of God to preserve humanity from self-destruction through rebellion. Therefore the new languages would start without any necessary connection with each other. And that's what appears to be true of the language families. They appear to be unconnected at the most basic level. I therefore suspect that linguists will never be able to relate all languages to a common ancestor.

I would therefore suggest that today's languages will potentially be relatable in anything from a dozen groups upward, but no further. Unless linguists use ridiculously broad criteria, for example, stating that the first personal pronoun in most languages contains a labial consonant (after all, there are only a handful of consonant types), no way will be found to relate the languages of the world to one common ancestor. This outcome, then, is different from the biological outcome when tracing genetically to the first human being.

The phonological genetic method of classifying languages does have other ways of classifying languages: in particular, some research in Britain in the 1980s¹³ drew attention to the fact that in the womb the unborn child cannot differentiate phonemes, but can identify rhythm and tone. Languages are broadly classifiable into stress-timed, syllable-timed and tonal. Some creationists might suggest that biological characteristics of Noah's three sons may favour links with these three classes. What we do know is that the listener identifies meaning more

readily from the rhythmic pattern of speech than from its phonetic detail.

But that's another story and would need further research.

Dr Charles V. Taylor,
Gosford, New South Wales,
AUSTRALIA.

REFERENCES

1. East, E. R., 1991. A critical examination of the genetic tree constructed by Cavalli-Sforza and colleagues. *CEN Tech. J.*, 5(1):29-41, commented on by J. H. J. Kramer in *CEN Tech. J.*, 9(2): 164, opening sentence.
2. However, we now have a 'computer Bible', praise God!
3. Genesis 11:1.
4. Chomsky, N., 1959. Review of B.E Skinner's 'Verbal behavior'. *Language* 35:26-58, where this commonly known fact is examined in depth.
5. Crystal, D., 1971. *Linguistics*, Penguin, London, p. 156.
6. Taylor, C. V., 1984. *The Oldest (Science) Book in the World*, especially p. 73.
7. Diringer, D., 1948. *The Alphabet*, Hutchinson's Scientific and Technical Publications, London, pp. 199ff.
8. For example, Taylor, C. V., 1983. What happened at Babel? *Ex Nihilo*, 6(2):20-23.
9. Kramer, Ref. 1.
10. East, Ref. 1, p. 30.
11. East, Ref. 1, p. 40.
12. Taylor, Ref. 8, p. 21.
13. Taylor, Ref. 8, pp. 22-23, footnotes (b) and (c).

THE BIG BANG AND THE 'BACKGROUND' RADIATION

Dear Editor,

The Perspectives column in *CEN Tech. J.* 9(1) contained a note which included the following quote:

*'The big bang made no quantitative prediction that the "background" radiation would have a temperature of 3 degrees Kelvin (in fact its initial prediction was 30 degrees Kelvin).'*¹

A quick search of my personal (and very limited) library revealed that the parenthesised portion of the above quote is misleading.

According to Timothy Ferris, Gamow did a back-of-the-envelope

R77HT1

calculation and arrived at an estimate of some 50 degrees K.² Dennis Sciama gives Gamow's figure as 'about 30 degrees absolute'.³ However,

'Gamow's colleagues Alpher and Herman corrected an arithmetic mistake and two other errors of Gamow's and arrived at a revised figure of "about five degrees"'^{4,5,6}

All this was in 1948.^{7,8} Another estimate was calculated by Peebles in 1964, who arrived at a figure of 10 degrees.⁹ Both these values are much closer to the measured value than the *miscalculated* figure of 30 (or 50).

The measured value of 3.5 degrees K made by Penzias and Wilson in June 1964 was not publicised until April 1965.¹⁰

None of this invalidates the point made in the Perspectives column. My concern is that as creationists we should not do less than justice to our evolutionist opponents, especially as we sometimes, and quite rightly, charge evolutionists with misrepresenting us.

An extended literature search would no doubt reveal a fuller picture. Readers with an astronomy background who are already familiar with the details may like to supply further information.

Lloyd To,
London,
UNITED KINGDOM.

REFERENCES

1. Anonymous, 1995. Did the universe have a beginning? *CEN Tech. J.*, 9(1):3.
2. Ferris, T., 1988. *Coming of Age in the Milky Way*, The Bodley Head, London, p. 213.
3. Sciama, D., 1967. Cosmology before and after quasars. In: *Frontiers in Astronomy, Readings from Scientific American*, W. H. Freeman and Company, pp. 340-341.
4. Ferris, Ref. 2.
5. Portor, R. (ed.), 1994. *Hutchinson Dictionary of Scientific Biography*, p. 10.
6. Chown, M., 1993. *Afterglow of Creation*, Arrow Books, p. 38.
7. Riordan, M. and Schramm, D., 1993. *The Shadows of Creation*, Oxford University Press, p. 12.
8. Chown, Ref. 6.
9. Chown, Ref. 6, pp 43-45.
10. Chown, Ref. 6, pp. 57-62.