

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.

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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.
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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

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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.

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London,
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8. Chown, Ref. 6.
9. Chown, Ref. 6, pp 43-45.
10. Chown, Ref. 6, pp. 57-62.