



The pop star controversy

It took me years to write my three bestselling books on cosmology, mathematics, and cryptography. Yet I am particularly proud of a 500-word article that I wrote last fall in less than an hour and of the hullabaloo that it caused. The consequences were bizarre: As far as I know I became the first ex-particle physicist to persuade a No.1-selling pop artist to re-record a song to make it more scientifically accurate.

The artist was Katie Melua, Britain's answer to Norah Jones. In October she had a top-five hit with a song entitled *Nine Million Bicycles*, which essentially said that it was a fact that there are nine million bicycles in Beijing. She went on to quote another fact, namely that she would always remain with her new found love. So far, so good.

However, in the second verse, Katie made a reference to cosmology that implied that the universe is 12 billion years old, whereas current estimates imply an age of 13.7 billion years. While this error annoyed me, the next line was even more irritating. She implied that scientists could only ever guess at the age of the universe, contrasting such guesswork with her own confidence in her blossoming long-term love.

I responded by writing an article for *The Guardian* newspaper in which I corrected the fact and tried to explain that the number is not a mere guess but rather a careful measurement. To some extent my article was tongue-in-cheek but I was also trying to make a serious point:

The original verse by Katie Melua in the original version of *Nine Million Bicycles*

We are 12 billion light years from the edge  
That's a guess  
No one can ever say it's true  
But I know that I will always be with you.

The new, more scientifically accurate verse by Simon Singh

We are 13.7 billion light years from the edge of the observable universe  
That's a good estimate with well defined error bars  
Scientists say it's true, but acknowledge that it may be refined  
And with the available information, I predict that I will always be with you.

Listen to the re-recorded version of the song at  
[www.bbc.co.uk/radio4/today/listenagain/ram/today1\\_melua\\_20051015.ram](http://www.bbc.co.uk/radio4/today/listenagain/ram/today1_melua_20051015.ram)

Although much of cosmology seems fanciful and is indeed still speculative (for example, theories about wormholes and inflation), there are some aspects that are on much firmer ground, such as the age of the universe.

I thought that would be the end of the matter but I was wrong. Mike Batt, Katie Melua's co-writer, wrote a rebuttal in the same newspaper, light-heartedly defending his poetic license. Katie herself occasionally commented on my article when she was being interviewed on TV and radio about her new album. Eventually, the artist-versus-scientist controversy was featured in two other national newspapers, on a primetime quiz on BBC1, and in newspapers in Germany, Australia, and India.

The highlight of the whole two weeks came when Katie Melua offered to re-record the contentious verse according to some lyrics that I had composed for her. We met in a recording studio where she admitted that she was particularly embarrassed by the error in her song because she had been a member of the astronomy club at school. I admitted that I was embarrassed by my lyrics, which had sacrificed rhyme for reason. I had also sacrificed scansion and any notion of romanticism. Nevertheless, the result was played on Britain's biggest breakfast news radio show.

Thanks to my flippant spat with Katie, people who would never think of picking up my 500-page book on the big bang were getting a dose of cosmology. As a writer who wants to get people excited about science, the writing of the original article was probably the most productive hour of my career.

Simon Singh

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