



Private prescription:

A thought-provoking tonic on the lighter side

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A personalised limerick – evidence of esteem?

Those readers who regularly scan my column will know that I have a penchant for limericks. Not the bawdy, obscene ones, I hasten to add, but those that either exploit the anomalies of spelling or use tongue-twisting sequences especially when the subject matter is science. It is while indulging in this pastime that I have noticed that a high proportion of limericks in this area specifically refer to scientists by name. The idea of a personalised limerick is not new, having precedents among presidents, politicians, poets, philosophers, the military and royalty, but in the majority of these the personality is parodied for some action or other. In the case of scientists this is not the case. Here the limerick is humorous of course but factually correct, often referring to a specific event in the scientist's life, a theory, an invention or, in some cases, an equation. Some, especially those that refer to distinguished historical scientists, combine achievements with personal attributes. For example, the limerick written about Sir Isaac Newton [1]:

A calculus fit to compute on,
White light, and a head to drop
fruit on,

A mind to absorb it,
And soar into orbit-
That's all that it takes to be Newton.

It is not surprising that the scientist about whom more limericks have been written than any other is Albert Einstein, and several appeared in an earlier article [2]. Limericks about Einstein range from those that simply recite his equation [3]:

Albert Einstein's the man we must
credit
For being the man who first said it.
The name of the game
That brought him his fame
Was $E = mc^2$ – Geddit?

To those that are more esoteric [3]:

To Newton, and most of the race,
Gravitation is just one special case
Of forces which obey
 $F = ma$;
But to Einstein it results from
curved space.

Inventors

Inventors are not immune from personalised limericks. A good example of the use of the genre in celebrating the inventor

and the invention of a rather obscure, but important, scientific instrument, is the limerick that refers to Samuel Pierpont Langley (1834–1906) an American astronomer and physicist who, in 1878, invented the bolometer, a radiant heat detector that is sensitive to differences in temperature of one hundred-thousandth of a degree [3]:

Oh Langley devised the bolometer.
It's really a kind of thermometer
Which measures the heat
From a polar bear's feet
At a distance of half a kilometre.

Actually, Langley used his invention to study the sun but the device could easily be developed to measure the heat from a polar bear's foot!

'An accolade not to be dismissed out of hand'

Modern day scientists

You do not need to be dead to have a personalised limerick, as illustrated by those written about the two Nobel Prize winners for Physics, Tsung Dao Lee (prize winner in 1957) and Steven Weinberg (prize winner in 1979). The first relates to the debate between Einstein and Lee [2]:

A scientist named Lee wrote a
note on
A way to change mass into photon.
He showed Einstein his data,
But he made 'light of the matter'
And said it was nothing to float on!

The debate was about the incompatibility between Einstein's theory of general relativity, which provides a framework for understanding the universe on the largest of scales (stars, galaxies, and so on) and quantum mechanics, which provides a framework for understanding the universe on the smallest of scales (i.e. subatomic particles).

The second relates to string theory, a modern theory that attempts to resolve the tension between general relativity and quantum mechanics by hypothesizing that the universe consists of eleven dimensions and that the properties of all matter from the smallest of subatomic particles to the largest galaxy are a manifestation of the vibration of microscopically tiny loops of energy called strings [4]:

Steve Weinberg, returning from Texas
Brings dimensions galore to
perplex us.
But the extra ones all
Are rolled up in a ball
So tiny it never affects us.

Incidentally, the last limerick was written by a fellow scientist and contemporary of Weinberg's, Howard Georgi, the Mallinckrodt Professor of Physics at Harvard University (Cambridge, MA, USA). However, even this is not unique in the genre. Richard Cowen from the Department of Geology, University of California (Davis, CA, USA) and author of the best selling book *History of Life* [5] has written a limerick about David Carrier from the Department of Biology, University of Utah (Salt Lake City, UT, USA) specifically referring to Carrier's research on the locomotion of the early tetrapods (salamanders and lizards), and how this

could have influenced the evolution of the vertebrates [5]:

The reptilian idea of fun,
Is to bask all day in the sun.
A physiological barrier
Discovered by Carrier
Says they can't breathe if they run.

David Carrier reported that the sprawling locomotion of these reptiles forces them to compress each lung alternately as they move, with the result that if they run they are unable to breathe [6].

Pharmaceutical scientists

Examples of personalised limericks about pharmaceutical scientists are limited, as far as I can determine, to one about Emile Coué (1857–1926). Born in Troyes, France, Coué became convinced of the power of the imagination as a therapeutic force, promoting the technique of auto-suggestion characterized by the repetition both morning and evening of the words 'everyday in every way, I am becoming better and better' [1]:

There was an old Doctor called Coué,
Who said to his patients, ' J'ai voué,
To cure all your ills
Without any pills-
You just think yourself better –
that's the new way'

Evidence of esteem

Of these examples of personalised limericks, several exist in anthologies alongside those of the standard, unashamedly bawdy variety. Others have survived in compilations of humorous quotations. It is pertinent to ask, why have these withstood the test of time and fashion? Probably, in the first instance, because they are amusing and clever in the use of words and not because of the scientist mentioned. In fact, it is likely that the scientist would not be that well known to the general public. However, if the name of the scientist is included along with their achievements, then all the better for that scientist – an accolade not to be dismissed out of hand. Evidence of esteem for the next research assessment exercise!

References

- 1 Parrot, E.O. (ed) (1983) *A Penguin book of Limericks*, Penguin Books
- 2 Rowe, R.C. (2001) Science with a smile – the limerick. *Drug Discov. Today* 6, 712–713
- 3 Gaither, C.G. and Cavazos-Gaither, A.E. (eds) (1997) *Physically Speaking*, Institute of Physics
- 4 Horvitz, L.A. (ed) (2000) *The Quotable Scientist*, McGraw-Hill
- 5 Cowen, R. (1994) *History of Life* (2nd edn), Blackwell Science
- 6 Carrier, D. (1987) The evolution of locomotor stamina in tetrapods – circumventing a mechanical constraint. *Paleobiology* 13, 326–341

Do you know a key figure in pharmaceutical research who is about to reach a significant anniversary?

Why not share the celebration of their anniversary by writing a personal tribute to them in recognition of their achievements for our new *Personalia* section of *Drug Discovery Today* (see the 1st August issue for examples).

If you wish to write a personalia, please contact Dr Rebecca Lawrence, *Drug Discovery Today*, tel: +44 20 7611 4143, fax: +44 20 7611 4485, e-mail: rebecca.lawrence@drugdiscoverytoday.com