

# Engaging through the arts

Wendy Barnaby samples some poetry and  
Jane Fletcher celebrates ballet and science

## Jocelyn Bell Burnell's poetry collection

### Wendy Barnaby dips in

Most astronomers aren't into poetry, but Jocelyn Bell Burnell collects poetry with astronomical themes. She's kept quiet about it until relatively recently, unsure about the reception her colleagues might give a scientist who dabbles recreationally with words. But now that she's being more open about it, many of her finds are being greeted with delight by fellow astronomers and lay audiences alike.

'I think using poetry reaches an audience that other kinds of talks do not reach. In particular I feel it is a way to engage with people who are scared of science, and to introduce them to a bit of science,' she says.

As well as collecting existing poems on astronomy, Bell Burnell has helped to swell the genre. With Maurice Riordan, she has edited a book of poems about space.<sup>1</sup> It contains existing and new poems – those by poets commissioned to create new work inspired by discussions with space scientists.

### Accurate astronomy

Bell Burnell's collection consists of poems which are accurate astronomically – they don't talk about moons made of green cheese. Nor are they of the 'Your eyes are like the stars' variety. They deal with the astronomy of the last 50 years: the subject she has been involved in and helped to shape. She is currently the President of the Institute of Physics.

Both the American poet Robert Frost and the west country's Thomas Hardy owned their own telescopes. Astronomy found its way into their poems. Here's an extract from *The Star-Splitter*, by Frost, which tells the story of Brad McLaughlin:

... So Brad McLaughlin  
mingled reckless talk  
Of heavenly stars with  
hugger-mugger farming,  
Till having failed at hugger-  
mugger farming  
He burned his house down for  
the fire insurance  
And spent the proceeds on  
a telescope  
To satisfy a lifelong curiosity  
About our place among  
the infinities...  
Light may travel at 186,000 miles per  
second, but it still takes time to reach  
us from stars. Elizabeth Jennings  
reflects on this in her poem, *Delay*.

The radiance of the star that leans on me  
Was shining long ago. The light that now  
Glitters up there my eyes may never see,  
And so the time lag teases  
me with how

Love that loves now may not  
reach me until  
Its first desire is spent. The star's impulse  
Must wait for eyes to claim it beautiful  
And love arrived may find us  
somewhere else.

### Mortality

Some poets write about comets. Bell Burnell wonders whether it's a way of coping with their mortality, by thinking about who will be alive to see a comet on its next appearance. The American poet Stanley Kunitz saw Halley's Comet twice; once as a small child and again in his old age. His poem, *Halley's Comet*, begins:

Miss Murphy in first grade  
wrote its name in chalk  
across the board and told us  
it was roaring down the stormtracks  
of the Milky Way at frightful speed  
and if it wandered off its course  
and smashed into the earth  
there'd be no school tomorrow...

Black holes seem threatening to Bell Burnell, so she resonates with the way Primo Levi describes them in *The Black Stars*:

The sky is strewn with horrible dead  
suns, Dense sediments of mangled  
atoms: Only desperate heaviness  
emanates from them, Not energy,  
not messages, not particles, not light.

Light itself falls back down, broken by  
its own weight.

'I love science, but find that science  
24/7 is not enough for me to be a  
rounded person,' says Bell Burnell.  
'Poetry is healing and calming, and  
I can enjoy it at stressful times when  
I can't do science.'

1. M. Riordan, J Bell Burnell, eds (2009),  
*Dark matter: poems of space*.  
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# Dancing for Darwin

## Jane Fletcher celebrates ballet and science

Increasingly, choreographers are turning to the world of science for inspiration. But does scientific theory have a legitimate place in the choreographic process? Can Darwin's theory of natural selection be successfully communicated through dance? Mark Baldwin, Artistic Director of Rambert Dance Company, hopes that his latest piece, *The Comedy of Change*, does just that.

For his new work he delves into Darwin's theory of evolution and natural selection in celebration of Darwin Year.

### Choreographing Darwin

Baldwin worked in consultation with Cambridge scientist Nicola Clayton to identify three Darwinian concepts that informed his choreography: 'same but different', 'reveal and conceal' and 'past and future'. He is quick to point out that his work is not a lesson in evolution. Rather, it seeks to draw parallels between art and evolution, creating 'a piece that makes the science less baffling and more enjoyable.'

Clayton specialises in the behaviour and cognitive evolution of Corvids – rooks, jays and ravens – and is also an avid dancer in her spare time, making her the perfect choice in her role as Rambert's Scientific Advisor for the project. She is hugely enthusiastic about bringing together the two worlds of science and dance: 'I think the link is a fascinating one; it provides the opportunity to build a bridge between two very different fields,' she says.

'The topic is fabulous because it is so richly diverse. I tried to distil ideas to inspire movement, energy and musicality, and therefore avoided obvious themes such as mutation and replication. The piece does not aim to explain Darwin's theories, but I hope it will get people thinking about science, the beauty of the natural world and our place in it.'

### Engaging with feelings and thoughts

How successfully does the dance engage the audience with science? Professor John Spicer from the University of Plymouth was invited to give a talk immediately after the première at Theatre Royal Plymouth in September. He agrees that, although the piece does not explicitly spell out Darwin's theory, the broader themes surrounding evolution are present.

'Throughout the piece it's easy to see the allusions to individual variation and the functional beauty of courtship displays framed as dances,' he says. 'The themes that drive the piece are larger than materialistic biology. If I want to know about natural selection I go to a textbook. If I want to engage with feelings and thoughts invoked by notions like natural selection, I turn not to biologists, but to the artist who takes me where science just cannot go.'

'I'm all for more interaction between the arts and science but it's worth remembering that, while they may focus on the same subject, they have different methods and outcomes – something to be celebrated.'

### Bespoke projects

Having studied biology at university, Baldwin has always been fascinated by the natural world. *The Comedy of Change* is his third major piece for Rambert and his second to be inspired by scientific theory following the acclaimed *Constant Speed* in 2005, commissioned by the Institute of Physics for Einstein Year.

Together with the Teacher Scientist Network, Rambert's Learning and Participation department has worked with science teachers to develop bespoke education projects for schools, uniting the disciplines of science and dance.

Building on its existing links with the scientific community, the Biotechnology and Biological Sciences Research Council (BBSRC) and the Wellcome Trust have funded Rambert to develop projects designed to enhance the public's appreciation of the piece and understanding of the theories that have inspired it. These include educational films for the website, informative display boards in theatres and guest scientists joining the creative team for pre- and post-performance talks, all of which will continue into spring 2010.

For more information, tour details and to book tickets visit

[www.rambert.org.uk/comedy\\_of\\_change](http://www.rambert.org.uk/comedy_of_change).



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