

LIVING LIGHT

COMPOSER'S NOTES

THE SONG IN A SENTENCE (or two...)

There are numerous forms of life on Earth exhibiting the beautiful phenomenon of bioluminescence – the ability to glow in the dark. My song celebrates this aspect of life's wondrous diversity.

HISTORY & MAIN POINTS OF THE SONG

Back in 2001 I was involved with a science week at Gatehouse School, Dawlish in my home county of Devon, UK. Funded by - the now very sadly defunct - Committee On the Public Understanding of Science (unrelated to the American COPUS, by the way), the week saw a succession of practising scientists presenting aspects of their work to children of all ages from 5 to 11 at the school. I was commissioned to commemorate and celebrate the week in song and 'Living Light' is my favourite song of the resulting numbers.

I'm ashamed to say I don't remember the speaker's name, though I know he worked at Cardiff University. I do remember that he was doing research on inserting genes from, I think, jellyfish into human cells and using them to detect cancer cells. What was so inspiring was his fervent enthusiasm for the work he was doing. He'd always been fascinated by bioluminescence and this was still his passion – there was no doubting that. I was so stimulated by his talk that I went straight home and wrote the song the same day.

This is one of my 'celebration of science' songs. There's not a huge amount of hard science information in the lyrics, but it's supposed to excite interest in the topic, encourage discussion and creative work.

The song mentions swimming amongst phosphorescence, but I didn't actually experience this until 2 or 3 years later on holiday in Turkey. My friends and I rented a small but lovely sailing yacht for two days and a night and the local skipper took us on a tour of many small islands near the coast. Tied up at our overnight berth we decided to take a dip in the dark and what we saw was one of the beautiful sights I've ever witnessed. Around each swimmer there appeared an explosion of what looked like tiny stars, bursting into light as a hand or leg moved through the water then fading away in a matter of seconds. I was wearing a diving mask and was able to watch my friend Patrick dive quite deep leaving a trail of ephemeral galaxies in his wake. I remember humming the song to myself as I swam, astonished that what I was seeing was real – not some special-effects movie. The lights are caused by minute creatures in the water, stimulated to glow by a shifting presence amongst them.

STYLISTIC POINTS

I often ask singers to put the words of my songs over just as though they were speaking them – to not 'sing-through' too much. But this applies less to this song. I like it to be performed very lyrically though not too slowly – the cascading patterns of the refrain's piano accompaniment need to sound scintillating and evanescent just like those luminous plankton.

OTHER ACTIVITIES

- A whole project could be constructed around this song, exploring the phenomenon of light production from both living and non-living materials. It might be fun to obtain some luminous paint and portray scenes from the song for viewing in the dark.
- Explore other unexpected sources of light: pulling apart the sticky strips of a self-sealing envelope produces tiny flashes of light, for example, that look like sparks, but aren't. Or generate static electricity by rubbing a balloon on your hair or on a woolly jumper and watching the sparks fly in a darkened room.
- You could extend your study to include fluorescence – where some surfaces apparently reflect more light than has landed on them, by converting invisible wavelengths into visible ones. A great way to introduce the concept of the electromagnetic spectrum perhaps.