

`Discord and deadly Mischief` - Darwin`s Struggle To Go Public

One of my colleagues recommended a book written for children about the Victorians which had particularly caught her attention, with an entry naturally enough for Charles Darwin.

It says:

`His mother was a Unitarian which meant he was brought up to think for himself.` I liked this and was curious to know what entries there might be for other famous Victorian people. For Queen Victoria`s husband, prince Albert, there is a caption - `hard working German husband` and for the writer George Eliot who had Unitarian sympathies, he`s written:
`George Eliot and her partner George Henry Lewis were two of the ugliest people in London but they loved each other dearly` (*Bob Fowle: Who? What? When? Victorians*)

So I reckon we should be quite content with the description of Charles Darwin as a man `who was brought up to think for himself.`

Today`s address is about Darwin`s struggle to go public with his theory of natural selection. This has been very well documented.

All the evidence does seem to suggest that fear of the consequences - that is public outrage with a concept that challenged cherished Christian belief, was a very big part of his reluctance. But his instinct as a scientist was to be as sure as he possibly could be before he went public - doubly important because of the critical response he expected.

One of his biographers Rebecca Stott who wrote *Darwin and the Barnacle*, makes the point in her introduction, that all that barnacle work - the close scrutiny of barnacles from all over the world that took up eight years of his time, `was driven by curiosity and obsession but also by an instinct for postponement`. She says there was no doubt he was hesitating by taking on the barnacles before he went to print with his bold species theory, but she says `it was a particular kind of hesitation not driven by fear, uncertainty or ambivalence but by the realisation that the time was not yet right for publication of his theory and that he would need to prove himself as a systematiser if he was to be listened to when he did publish.`

I feel sure she`s right to say that it was the right instinct and not prevarication simply out of fear and faint heartedness.

Having said that, there were all these other factors that played their part in holding him back from publication.

He wasn`t by nature a self publicist, neither was he a man who wanted to rock the establishment. In many ways he was quite a conservative man. He was uncomfortable with the turbulence of the political scene in the 1840s. He and Emma moved out to Down in Kent at the height of some of the agitation in London. He came from a reforming tradition - had Whig sympathies, loathed slavery, wanted to see political reform but his mode of life was quiet and orderly. He was fortunate to be a man of means - a rich man.

Very fortunate. It ensured him the time and space to do the research in a very civilised way.

One of the things that comes across very clearly when you read the biographies about Darwin, are the stories of a handful of men he came in contact with who enjoyed nothing like the same privileged background as himself, who were also inspired and earnest - collecting, observing, writing - but they had no private means; they had to earn a living; they often ended up in poverty. There was no recognition or support for the kind of work they were doing.

Darwin was a respectable country gentleman with friends and family in the church and he didn't want to upset the apple cart. But his intellectual curiosity - thinking for himself was so strong in him - all that he'd seen, collected, documented in his notebooks compelled him to write and say what he did.

Fears of attack from some members of the church establishment were well grounded.

Very simply, Darwin had studied William Paley's *Natural Theology* when he was preparing for Anglican ministry at Cambridge and he was perfectly happy at that time with what it said. Paley's view that held sway was that all of teeming life testified to God's goodness. The creator God was a benevolent God who had created all forms of life so that they were perfectly adapted to their surroundings - exquisitely fitted. It was a very optimistic view - a belief in the goodness of the creator.

Supporting that view we have the creation story in *Genesis* providing a picture of separate species distinctly different from each other. Species, once created permanently, remained the same and when they reproduced they sustain those same permanent characteristics.

As for we humans - we have a special status: 'Let us make humankind in our image, according to our likeness....and let them have dominion.'

In the 19th century people were beginning to grasp the truths of geology - the sense of a much longer history of the earth before humans made their appearance. Fossil records showed that changes had taken place over a considerably longer period of time than the biblical calculation of 4004 years.

Much of the time Darwin was on his *Beagle* voyage he was collecting that kind of evidence. He'd read and was in full agreement with what the great geologist Charles Lyell had to say. They became very good friends. Lyell became a mentor.

Evidence of geological change grew. There was sufficient of it to quieten the critics. But evidence for biological change was much less easy to assimilate. Whatever his hunch, Darwin had to be able to show the mechanism for biological change, and that mechanism - by means of natural selection - had all kinds of scary implications for 'immortal man's origin from the beast'.

Lyell, the geologist was torn and unhappy by his friend's theory. Darwin wrote to him and said he could not believe in divine providence. "Why the misery if everything is ordained?" he asked. "I cannot persuade myself that a beneficent and omnipotent God would have designed the parasitic wasps with the express intention of their feeding within the living bodies of caterpillars."

But there were others who were almost egging Darwin on - they wanted a split between science and theology.

Thomas Huxley - a great supporter of Darwin (one of these extremely gifted men I mentioned earlier who was living on a pittance with no private means, his work unrecognized with no sponsorship from the Royal Society.) He had a great loathing for privileged clerics in Oxford and Cambridge on secure incomes and was really keen to mobilise Darwin's theory for his own ends. And he was combative and inflammatory:

"if I have a wish to live thirty years, it is that I may see the foot of science on the necks of her enemies." All of this was not exactly comfortable for Darwin. He was grateful for the support but didn't want to be used for radical propaganda purposes.

That provides a wee bit about the religious background creating tension for him. But then there is Darwin's human struggle.

All his life Darwin suffered from headaches and vomiting. Whenever he had to make public appearances or there was any controversy, or even when he was reading contemporary material from colleagues whose views weren't in accordance with his, he would suffer in this way.

He tried elaborate water cures which helped to some extent and were a popular alternative treatment in the mid 19th century.

It's been suggested that his illness was psychosomatic. It's pretty clear there was a lot to be anxious about: he'd been working on his ideas about transmutation quietly, secretly - human descent from animals was the logical consequence of his theory and once that was spelt out clearly he knew the furor it would cause.

From all that I've read about Darwin, I get the impression that he was dealing with a lot of conflicting stuff.

I don't think for a minute he doubted his theory - if he doubted anything it was that he would not possess sufficient evidence to convince others. He knew it would be an affront. When he first confessed his theory in a letter to his friend Joseph Hooker, a fellow naturalist in 1843, he said it felt like confessing a murder. It wasn't in his make up to fly in the face of established opinion with confident aplomb. He wanted to be approved of; he wanted the scientific community to really endorse what he had to say; he didn't want to upset his old Cambridge Anglican friends.

One of his biographers mentions how physically ill he became when he realised that Lyell, his mentor, took a different view to his on the adaptation of species.

And then there were family issues. He struggled with the death of three of their ten children, tormented himself with the possibility of hereditary reasons - Emma and he were cousins - and he was fearful his children had inherited his weak constitution.

His wife Emma was religious and believed in salvation. She wrote a beautiful letter to her husband in their early married life, aware of the possibility she might die in childbirth, aware of his religious doubts, fearful that his rejection of Christian salvation meant there would be no hope of eternal life with him after death.

In her letter to him she wrote that she ` believed he was acting conscientiously and sincerely wishing and trying to learn the truth.` She said ` I do not wish for any answers to all this, it is a satisfaction to me to write it, and when I talk to you about it I cannot say exactly what I wish to say, and I know you will have patience with your own dear wife...Everything that concerns you, concerns me and I should be most unhappy if I thought that we did not belong to each other for ever.`

In Randal Keynes biography it says ` Charles kept the note for the rest of his life.. At some point, perhaps many years later, he wrote to her on the outer fold: "When I am dead, know that many times I have kissed and cried over this. CD" Charles Darwin

So, we can say that the struggle to go public was a movingly human struggle and like all human struggles it makes our understanding richer.

I just want to finish with another, very human story. As Darwin was getting ever closer to the point of publishing *The Origin of Species by Natural Selection* and suffering repeatedly with spells of vomiting and a swimming head, His friend Joseph Hooker was doing some proof reading of the manuscript.

In a letter Hooker wrote this:

"I proposed ending the week by finishing Darwin`s MS when to my consternation I find that the children have made away with up to a quarter of it. By some screaming accident, the whole bundle...got transferred to a drawer where my wife keeps paper for the children to draw upon - and they have of course had a drawing fit ever since. I feel brutified if not brutalised for poor Darwin is so bad that he could hardly get steam up to finish what he did - How I wish he could stamp and fume at me. - instead of taking it so good natured as he will.`

His is a remarkable story of perseverance, courage, love and suffering.

Margaret Kirk