

Early in his career as a structural geologist, this month's castaway turned down a chance to live on a real desert island – but fortunately for this magazine he agreed to be stranded on our fictional version.

In the late 1960s Professor John Dewey, researched the concept of plate tectonics with fellow geologists in the United States. At the time, this work was both sensational and controversial.

We now take it for granted that the shell (or crust) of our planet comprises seven or eight major, and many minor, tectonic plates which 'float' on underlying geological layers. Earthquakes, volcanic activity, mountain-building and oceanic trench formation occur where these slowly moving plates meet and clash together on so-called 'fault-lines'.

Professor Dewey has received numerous awards for his work – and not just on plate tectonics. He is regarded as an authority on the evolution of mountain ranges.

He was elected Fellow of the Royal Society in

Sylvia Vetta talks to geologist Professor John Dewey about his love for English classical music and model railways

1985 and, in 1998, he was presented with the Wollaston Medal of the Geological Society of London – the Royal Society's highest award.

In 1992, Professor Dewey was awarded the Penrose Medal, the premier medal of The Geological Society of America. In 1996, he was elected to the United States National Academy of Sciences and is a Corresponding Member of the Australian Academy of Science.

When I interviewed him he had recently completed ten hours of interviews for the British Library for their *Dictionary of National Biography*.

But perhaps most importantly of all, Professor Dewey can explain that age-old conundrum of why time seems to pass faster the older you get.

"As a child, days and years seem long but as we grow older time passes at speed. It is understandable when you realise that, aged six, a year is a sixth of your life but aged 60, it is a fleeting 60th," he said.

So there you have it!

Professor Dewey was born in Woodford, East London, in 1937 – but he was brought up in Chingford.

His earliest memory comes from when he was just two years-old.

"When the Second World War broke out, my father, John Edward, anxious that our house might be bombed, sent my mother and I away to distant relations in Barry Island, South Wales. I remember walking down the stairs in their house looking up at model aircraft suspended from the ceiling. I can picture it even now.

"We stayed for only two weeks. My mother, Florence Nellie Mary, wanted to be with my father, so we took the train back to London. I remember standing on the platform at Cardiff



Oh, lucky man

station and seeing the Great Western Railway train with its chocolate and cream coaches. I remember the smell too, the steam and smoke and the sound – they played Bizet's *L'Arlesienne* over the speakers. That is how I fell in love with railways and music, aged two.

"In fact, if I cannot take my model railway to the desert island, I am not going!" Professor Dewey joked.

"I adore English music from Stanford and Parry to Delius, Bax, and Moeran. There are hundreds of composers people don't know about. I have a collection of about 4,000 CDs of classical British, Irish and French music plus lots of modern jazz.

"I guess that the British discs are quite sentimental, romantic even. A lot are in G minor – wistful, longing, pastoral. I listen to

some every day and cannot go to the island without them either."

I mentioned the problem of electricity on the island. John said "I will make do with a wind-up CD player, with a cupboard underneath to hold the CDs."

I did not want to remind him that in the end he could not take both his model railway and a CD player to the island, so I changed the subject and focused on his education.

Professor Dewey reminisced about Kings Road Church of England Primary School near his home, and its head teacher, Mr Swindell.

"He ruled with a rod of iron but we left proficient in the three 'Rs'. Slates were used for sums. I walked two miles a day to school and back – so I vividly remember getting my first bicycle," Professor Dewey said.

small geology department. If you want somewhere where they care about students and teach them well, go there.'

"He was right – the teaching was superb. On field trips, we did independent geological mapping. I worked around Weymouth and Lulworth Cove for six weeks.

"Making a geological map is not easy and that first one felt terrifying because I had to work things out for myself," Professor Dewey explained. "The following year, I mapped Cader Idris in North Wales. I have always preferred mountain to coastal geology."

Professor Dewey graduated in 1958 with a first class degree.

"If you want to be a professional geologist you had to have a PhD. Imperial College, London, had a marvellous research reputation. I was accepted and my thesis was to map an area in County Mayo in Ireland," he said.

"I spent two years there and became more Irish than the Irish. I drank Guinness and got to know the local farmers. Many of them and their children are still friends. I had cycled around Britain but Ireland was my first trip abroad."

But, in 1960, career possibilities for a geologist were limited.

"You could join an oil or mining company," he explained. "But I wanted to continue with research. The plum position was to work for the British Geological Survey. It offered a job for life. I applied and was offered a post but it was not quite what I expected.

"I was to work not in Britain, but in Fiji. It involved five years mapping a previously uncharted island. Following that, I could work in Britain being paid to go around the country – a dream of mine. But I put that offer on hold while I looked into academic jobs. I was offered posts at Leeds, Manchester and Liverpool universities. I opted for Manchester."

In 1961, Professor Dewey married Dr Molly Blackhurst. He had first met Molly at Queen Mary College, where she was reading for a degree in botany. A passing acquaintance developed into a lifelong relationship once they met again while both studying for PhDs at Imperial College.

Molly has also enjoyed a long and distinguished academic career researching plant diseases. When they married, she was just beginning her career as research assistant at Manchester College of Science and Technology. The newlyweds needed to find somewhere to set up home.

Professor Dewey said: "We found a three bedroomed semi in Didsbury, Manchester, for £1,700 – which was a lot then. For the mortgage, we needed a deposit which we did not have. When I mentioned it, the college registrar said, 'we can let you have £250 and take it out of your salary over two years.' In fact £250 happened to be the exact amount required – another stroke of luck. In fact, I consider myself a lucky man. I have been paid to do exactly what I wanted all my life."

Professor Dewey said: "Manchester is a seriously good university. I learned to love teaching and they let me teach geology in any way I liked."

Then, in 1964, a job at Cambridge came up.

"Professor Bulman, who was head of department at Cambridge, had heard of me from papers I had published and suggested I apply. It was a strange interview. We chatted

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*Professor John Dewey
at University College,
Oxford*

*Photographs:
Steve Wheeler*

After his primary school, Professor Dewey went to Bancrofts, an independent coeducational school in Woodford Green, founded by the Drapers' Company in 1737.

"I was a day boy at Bancrofts where I was very very happy. I loved sport and was reasonably proficient at cricket and rugby. I boxed and enjoyed athletics too," Professor Dewey said.

"I did lots of swimming in the thick yellow soupy water of the school swimming pool. In those days the water was only changed once a year! My best sport was gymnastics. I was obsessed with sport and did not concentrate on academic work until my housemaster took me aside and said 'Dewey, I think you have a decent brain but you are not good enough at any single sport to make a living out of it, so

why not start working for your O-Levels?"

"Typical of me, that set me off and I worked like crazy with the result that the school was amazed when I passed eight O-Levels. I took science at A-Level, but also did the English and German courses. My only Distinction was in A-Level art."

It was at Bancrofts that geology first came into Professor Dewey's life.

"My house master, John Hayward, was an amateur geologist and every year took ten of us on cycle tours of Devon and Cornwall, Dorset, the Lake District, North Wales, Northern Ireland, and Arran, over a period of six years. So by the time I was 18, I knew a lot about geology," Professor Dewey said.

"John Hayward suggested I apply to Queen Mary College, London. He said 'It has the best

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informally for an hour when he said ‘Oh by the way, we have decided to appoint you. Can you start in September?’

In 1967 in the USA while on a sabbatical from Cambridge, Professor Dewey found himself “in the right place at the right time.”

“I met Harry Hess (Princeton) Tuzo Wilson (Toronto) and Chuck Drake (Columbia) and they opened my eyes to a new kind of global geology,” Professor Dewey said. “They taught me to think on a larger scale.

“Chuck asked me to come to Columbia to the Lamont Oceanographic Institute. It was studying the oceans and the concept of continental drift that led to an understanding of plate tectonics. The rocks under the oceans are up to 160 million years-old, compared with the 4.4 billion years of the continental rock.”

In 1969 Professor Dewey’s work became well-known after publishing a paper on his work in *Nature*. A year later, with J M Bird, he published *Mountain belts and the new global tectonics* in the *Journal of Geophysical Research*.

“I was working on the Appalachians and found unity in their geology and it stretched from Alabama to Newfoundland to Ireland to Spitsbergen. It was a ‘Eureka’ moment. Here was 200 million years of earth history and evidence of continental drift and continents colliding,” Professor Dewey said.

“It was a dynamic time to be working in the field. The idea of the oceans opening and closing went down well in the US but was received with long faces everywhere else in the world.

“In England, the theory of plate tectonics was exceedingly controversial so it was difficult getting the research money. I tired of the conservative reaction so, when I was offered the post of Professor of Geology at the State University of New York, I jumped at it. For the next five years until 1980 it was the best geology department in the world. The students were terrific.”

During this period Professor Dewey produced a series of classic papers centred around the history of the Appalachians in Newfoundland as well as the Scottish and Irish Caledonides.

In later years, he concentrated on producing a model to describe the development of the Himalayan mountain range and Tibet.

I was interested in his take on Newfoundland. My son Adrian’s partner is from that island, which is the size of England and Wales – but with a population of only half a million.

“In 1970, Molly and I spent six months there and it was like going back in time 100 years. Walking into the bush only 30 miles from the capital city of St Johns felt like being at the end of world.”

Professor Dewey returned to the UK in 1982 as Professor of Geology at the University of Durham, a position he held for four years. As with several Durham geologists before him, notably Lawrence Wager, John was appointed Professor of Geology at the University of Oxford (and Fellow of University College) in 1986, a position he held until his resignation in 2001.

When Professor Dewey and his wife arrived in Oxford, they bought a house on the edge of Kennington. “We were not attracted by North Oxford and when this particular house came



Professor Dewey with one of his landscape paintings

on the market we jumped at it. We could not afford to buy it today!” he said.

The couple have two children, but neither have followed their parents into science.

Daughter Anne is a professor of dance and choreography in New Zealand. Son Jonathan, who lives in Finsbury Park, London, has his own company working in high-tech web design.

Over time, the walls of Professor Dewey’s home have become covered with his own paintings. The majority are, unsurprisingly, inspired by landscape.

Since that first trip abroad to Ireland in 1958, Professor Dewey’s research has taken him all over the world and those experiences are reflected in his art. I wondered when he first took up his paintbrush.

“My father, worked for the Post Office and Telephone Company but his passion was for art. He painted and yes he was also into model railways. He was a superb artist and good with his hands. I started painting as a child and have loved it ever since. It is a wonderful way to wind down. Can I take my paints and artist materials to the island?”

In 2000, John was offered a special professorship at the University of California. He returned to the States while maintaining a position as Senior Research Fellow at University College, Oxford.

“Davis (where Professor Dewey is based) is a civilised place to live – and even more attractive when they asked me what salary I wanted! “While there, Molly and I took a trip to Monterey and we walked along the famous waterfront street called Cannery Row. It was relatively undeveloped and could not have

changed much since Steinbeck wrote his eponymous novel – which was set there. In my mind I was walking where Doc Ricketts walked,” Professor Dewey said.

“Literature is important to me but two books stand out. Steinbeck’s *Cannery Row*, and *The History of Mr Polly* by HG Wells are the two books I treasure deeply. I must have read them between ten and 20 times and I never tire of them. It is like listening to music. I could not be without them. I will put one in each pocket when I am exiled to your island.”

Professor Dewey was recently asked to take part in an inquiry after Italian scientists were accused of manslaughter for failing to predict the devastating earthquake that struck L’Aquila, central Italy, in 2009, killing 308 people.

“I have been invited to take part as an external advisor on earthquake risk in Italy,” he said. “Geology involves catastrophic events. Volcanos do not erupt gradually. Pressure builds up on faults but then they go up with a bang.

“You cannot predict earthquakes with any accuracy. Lots of small shocks can dissipate the pressure but the best judgement is to never say never, because we just do not know. Geology is a bit like examining a crime scene.”

It was with some trepidation that I asked Professor Dewey which single item from his chosen collections would he take to our island.

He is determined to smuggle in the books but hopes to make room in the cupboard below the wind-up CD player for his art materials alongside some of his collection of English music. I think he is designing the cupboard to his specifications.