



of a junior doctor ended 37 years later with a mere 60-70 as a consultant – since the early 1970s Tallis rose at 5am every morning to write for two hours before work.

He kept the faith through 135 rejection letters until Macmillan agreed to publish his critique of postmodernist philosophy, *Not Saussure*. That was in 1988, and a novel, some poetry and a number of non-fiction books have followed – the most recent being last year's *The Kingdom of Infinite Space*.

Today, Tallis is a regular fixture at literary festivals. "I now have humiliating experiences like last time at Cheltenham, when I was next to Richard Dawkins where his queue was wrapped three times around the shop and I had a little stub that didn't get any bigger or any smaller," he quips.

Tallis has two works on the go at the moment, including *De Luce*, a book he's been chipping away at for 25 years – an attempt to explore the fact that the world makes sense.

The second is his critique of the idea that neuroscience plus Darwinism will explain everything about humans. This, he says, is a reaction against a trend of denying the gap between humans and animals.

Tallis is in no doubt about that gap and believes the initial split took place between five and six million years ago, when humans stood upright and looked at the world from a different perspective. The development of language, 40,000-100,000 years ago, cemented this gap.

He says: "When humans stood up, that change also liberated our forelimbs, which became a delicate explorer of space and stopped being a locomotive prop. Our fingers and thumbs have a unique dexterity

"I don't think we're animals. We've put a huge distance between us and our animal kin."

"Consultants lost their freedom to initiate – and everyone was told what to do."

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compared to other primates.

"That combination gave us a sense not shared by other animals that we can bring things about – we are conscious agents in a way that other beasts aren't."

There are undeniably elements of consciousness in some animals – experiments have shown, for example, that if a lipstick is put on a chimp which is then shown a mirror, the primate will touch its lips to take it off. But Tallis argues that there is a gulf between this and a human being's "sustained sense of self".

He says: "They live their lives but we lead ours. We're not mere organisms. Over the course of history, we humans have developed an ever more complex consciousness. Animals don't advance. A chimp five million years ago wouldn't look or behave any different to now.

"So I'm very preoccupied by this gap. What is our place in nature? How did we come to be different? And what does the future hold?"

Tallis, a committed humanist, believes we can have a biological – and non-religious – explanation for how we "escaped from biology", as he puts it. His starting point is the brain, or more precisely its limitations.

"Other than the individual mind or consciousness, we've created a third realm which is the public space, the human world. When I point at something, I'm sharing it with you. No other animals do this. The interesting thing about pointing is that when I point to something you can't see, you have a sense of something being there in a general sense. It emphasises your sense of possibility."

Indeed Tallis has written an entire book, *Michelangelo's Finger*, which is yet to come out, on the apparently simple gesture of pointing.

This is where neuroscience lets Tallis down. To his chagrin, the brain does not explain that much about human experience. Admittedly, little could happen without it but the forces that shape our daily lives tend to be external.

"Life's not simply a matter of intra-cranial events," he says. "This is a very elusive thought. If I decide to go to London to attend a meeting I have to engage with a whole series of enabling things like trains and rules of behaviour. And these things can't be explained by neurology and Darwinism.

"I say that reluctantly as a neuroscientist. We need a brain but our experience as humans requires us to engage with something which transcends individual brains."

Some may wonder about the point of such seemingly abstract concepts and most people will live perfectly fulfilled lives without giving them too much thought. But Tallis is adamant that such ideas matter.

"Take the work of someone like John Gray, for example, the author of *Straw Dogs*. He says that we humans are just animals – just a collection of giblets – and are no more important than slime moulds, which will probably outlive us anyway," he says. "I think this kind of thought process – social Darwinism, if you like – can lead to pessimism, and can be used to justify the bad treatment of others.

"If we reduce humans to no more than vehicles for carrying genomes then it becomes 'gene eat gene', and there is no reason to treat other genes, other human beings, nicely. Do we really want that kind of world view? It could end up as a self-fulfilling prophecy, and one which is damaging to us all." ■