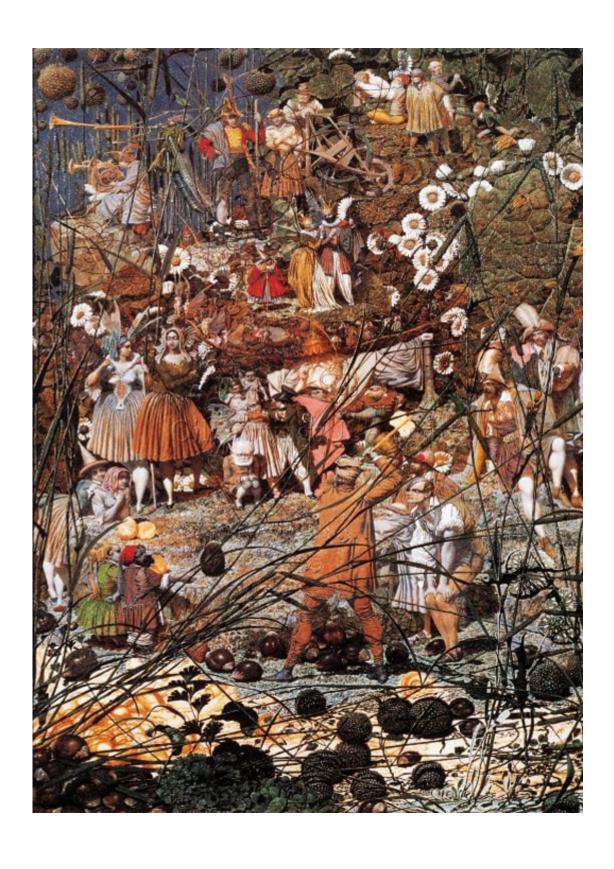
Through a Gnome's Cap—My Path to Becoming a Crackpot

by **Shaun Johnston** (May 2021)



Given the increasing professionalizing of science and increasing efficiency of media gatekeepers, opportunities for crackpots to confuse public opinion have been greatly reduced. So what keeps them going? In this essay, a selfacknowledged crackpot describes how applying creative writing to probe such concepts as consciousness and free will lead over three decades to the writing of six books and descent into unorthodoxy. Progress in such a quest can be its own reward.

I'm a crackpot. I'm used to having my bright ideas mocked and dismissed. Crackpots like me, as we try to wrestle our ideas into making some kind of sense, may endure this scorn for decades. Have you ever wondered what keeps us going? From my own experience let me tell you.

I started out as one kind of crackpot, ended up as another. That is, I started out as a "physicalist." After studying science at college (University College London), I took it for granted that everything real, everything that mattered in the universe, was purely physical, everything about it determined ahead of time by the laws of physics.

But I was a special kind of physicalist. I was an epiphenomenalist—I also experienced a stream of conscious thoughts that, although they seemed just as real as physical objects, seemed to me to be under my control. I could decide what to think about next. My thoughts seemed not be determined ahead of time, as everything in a purely physical world should be.

How can contradictions like that be resolved? Hardline physicalists resolve this one by saying, no, we can't really control our thoughts, that can only be an illusion. Our thoughts are simply how our brain chemistry registers in consciousness; they're just as physically determined as our brains. Because there is nothing in the universe except purely physical matter, free will is physically impossible.

But I wasn't prepared to give up my free will entirely. I reasoned that, because my thoughts weren't physical, they weren't necessarily determined by physical laws, so I was free to think whatever I chose to. But I wasn't free to make my body do whatever I wanted. Because my thoughts weren't physical, my purely physical brain couldn't know about them so my thoughts couldn't express themselves in what my brain made my body do. My body would go on doing what its purely-physical brain told it to, while my consciousness stood apart from it, watching it, bemused, from a little distance, powerless to intervene.

And that was how I made sense of the world until, at the age of 29, I had a sudden epiphany and realized I'd all along been wrong.

The epiphany struck me while I was enjoying a solitary lunch in a small park near City Hall in Manhattan. I was suddenly overwhelmed by an astounding realization. I realized I did have real free will.

What brought about my revelation was realizing there wasn't any part of my conscious thinking I couldn't talk about or write about—and those are decidedly physical happenings. And, although my body spoke or wrote about my thoughts only when I consciously told it to, obviously nothing was preventing it from having full access to them at any other time. Brain and mind may exist in different realities, but they can communicate freely with one another, in both directions.

My epiphany rescued me from being one kind of crackpot, the physicalist kind. But that was only to plunge me into different obsession. As converts to a new belief often do, I made it my mission to come up with arguments capable of convincing other people of my new conviction. I resolved to find ways of validating free will.

I would try to capture the essence of my revelation in a simple puzzle. You are provided with two bins, one for things that are physically determined, the other for things that have free will. You are to examine everything in the universe and put it in the appropriate bin. When you've finished, into which bin will you put yourself?

Of course, for a dedicated physicalist this presents no problem since for them everything, including themselves, is purely physical and by definition physically determined, so they'll have no difficulty assigning themselves to the "determined" bin. This first version of my test was no threat to them. So I elaborated it. After you've carried out this test, a supernatural being that does have free will undertakes it, allocates everything to the two bins, ending by putting itself into the "free will" bin. Into which bin will it have put you? If you undertook the test, you must have believed you were capable of distinguishing between what is purely physical and determined and what has free will. Can you point to anything else, that's purely physical (apart from a humanprogrammed computer), that's capable of making such a judgment? I doubt you can. Maybe merely by undertaking to carry out this test you showed you really believe you have free will.

All this was no more that old-fashioned armchair philosophizing, long since abandoned in favor of experimental science. But it can reveal something you don't get from scientific experimentation by itself—gaps in our thinking, places where we're missing concepts we need, and concepts we've already got that serve as stumbling blocks, just getting

in the way.

One of the ways I explore concepts like this is by writing stories about them. For example, I began to find the distinctions we make between body and mind, between determinism and free will, distinctly unhelpful. To evaluate them I wrote a story in which I gave living creatures innate wisdom, measured in "creatrons." My story ended with the total in creatrons summed up over all living kingdoms amounting to more than half the influence on them of physical determinism. So in effect, in my story, living creatures did have free will. This convinced me that, far from being helpful, the terms "free will" and "determinism" had actually been getting in our way.

I set myself instead to come up with a substitute for them. I came up with the concept "conscious deliberation." I defined it as consisting of:

- Predicting and anticipating possible future events
- Weighing their outcomes
- Initiating actions to bring about a preferred outcome.

Isn't this something we all experience, every day? "It looks like rain, should I take an umbrella? No, I won't be out long, a jacket with a hood should be enough." Consciously anticipating, weighing, and initiating actions to favor optimum outcomes. Isn't that very similar to what we call reason, or simple common sense? Isn't this a fundamental part of the free will we value in ourselves yet find totally absent in the purely physical world? A volcano can't anticipate future events. Energy can't weigh outcomes.

Now my test becomes, you're given two bins, one for things capable of conscious deliberation and the other for things that aren't. Now which bin would you put yourself in? I think even physicalists would put humans, including themselves, into the "conscious deliberation" bin, everything

purely physical into the other.

Finally, one more extension of the idea. It involves an addition to our ability to anticipate future events. I now included anticipating how we could intervene in those events. From among our own talents, what can we bring to bear to improve those outcomes? Once we asked that, what I've called conscious deliberation amounted to "creativity." Take a scientist for example. To understand some physical process, he comes up with possible explanations, hypotheses. He anticipates what will happen if he intervenes in the process. Can he produce an outcome telling him which of his hypotheses is right? He creates apparatus and a procedure making him able to impose that intervention. By my definition, that's creativity.

Now my test is, after allocating everything to the two bins, "creative" and "not creative," in which bin will you put yourself, given that "creative" means "able to anticipate how one's own interventions could affect the outcomes of various possible future physical events"? I think this is the distinction we want to make. And it refers to something we know exists, because we're all capable of this kind of creativity, a precious aspect of our identity, an equivalent for free will, that we find absent in anything that's purely physical. No need to talk about body and mind, determinism and free will. They've been red herrings. We're better off without them.

Turning concepts into characters in a story, as I did by allocating "creatrons" to living creatures, and seeing what happens, is not in itself crackpot. It's probably no more than eccentricity. It won't by itself get you driven out of polite society. What happened to make me a true crackpot was what happened next, coming to doubt Darwinism. In time, as I used storytelling to explore successive issues, my mission became to scupper Darwinism (the modern synthesis) and have it banished from the school science classroom. Today that's a

highly unacceptable form of crackpottery.

I've been interested all my life in what it means for us that we evolved. In my mid-fifties, I began writing a series of books on the subject. The first, Father, In a Far Distant Time I Find You, was a Utopian novel in which, over the next four thousand years, a series of civilizations succeed one another, each representing one of the stages of evolutionary theory we'd already gone through, from Charles Lyell's uniformitarianism to a supposed future evolution of culture and beyond. Writing let me explore the implications of theories of evolution for our own sense of self, for our common human nature.

When I began, I was an ardent Darwinist. I often told myself that, even if someone disproved Darwinism, I'd go on believing in it because I'd made it the foundation of my personality. But two years of questioning the impact of theories of evolution on human nature drove cracks in that foundation. And then my lunchtime epiphany kicked in. How, I asked myself, could a purely physical mechanism of evolution like today's Darwinism account for us having evolved something non-physical like what I defined above as creativity? I've spent the past few decades struggling to come up with answers. In the process I've come up with what amounts to an entirely new natural philosophy. Crackpot enough for you?

Where do the capabilities come from that allow us to become creative? They develop in us without us having to do anything. Those capabilities evolved in us. So evolutionary processes can transact, somehow, in terms of something corresponding to creativity in us. Then, not only can they operate through natural selection, they may also operate through their own form of creativity. Logically, that is, if it can happen in us, it can happen elsewhere in the universe, and that includes processes of evolution. So right there is an alternative mechanism of evolution: evolutionary processes can anticipate/predict alternative possible future events, imagine

intervening creatively in their outcomes, evaluate those outcomes, and act physically to bring about their preferred outcome. Again, my logic is, if we can be creative then the capability for it can exist elsewhere in the universe, and since processes of evolution have built that capability into us, it's possible they are capable of it themselves. To think otherwise is "human exceptionalism."

Let's for a moment define evolution like that, as creative intervention in the physical world. Now let's turn that around. Now we have two kinds of processes active in that world: physical processes, and evolutionary processes. Until we find evidence for any others, let's assume these are the only kinds of processes there are. Now, consider thinking. We experience it as not being driven by physical processes. The only other processes we know of are evolutionary processes. So let's suppose thinking consists of thoughts evolving into one another. Then, thinking is evolving.

Now, again, turn that around. Our thoughts are the result of something evolving. What else evolves? Species of living creatures evolve. Could that be the result of someone thinking? Could there be some agent, with a brain that's associated with some kind of a mind, that can think new species of living species into existence?

Time for a demonstration of how I use storytelling. It's what I call a wireframe story, just the minimum characters and properties needed to explore the issue at hand. The issue is, who or what is this agent? Whatever it is, it must have remained in existence since life first began. What could that agent be? I could think of only two possibilities: the environment, Charles Darwin's choice. And, genomes.

To explore the capabilities of genomes I embarked on a story to explore their role in the development of an embryo into an adult. Standing in for the developing embryo is the building of a palace. The part of the embryo's genome is

played by a gnome. You, the reader, play the prince for whom the palace is being constructed. I remain the author.

The story starts out in a small cabin corresponding to the single celled embryo.

Story: The Gnome

He'd never asked his parents anything about their palace, the prince realized—how they built it and how long that took. He just knew they used a manual containing all the information they needed and that a copy of this manual lay in a cupboard in his one-room cabin, next to the photocopier.

"Let's begin," said the prince to himself, and he opened the cupboard.

Inside was not one manual but dozens of them. When he took one down and opened it, he could barely read the tiny type that covered each of its many pages. And the text consisted of nothing but strings of symbols. He brought out each of the volumes and thumbed through them but he found no plan or any instructions for how to use them. What was he to do?

At this point there was a creaking sound in the ceiling and a trapdoor appeared that the prince had never noticed before. Peering round the edge of the trapdoor came the face of a gnome. "Can I help?" the gnome asked.

The prince had never seen the gnome before. "Who are you?" he asked.

"I built this room," said the gnome. "Every room in the old palace was built by gnomes like me. We live in these attics."

The prince helped the gnome down. "Then you know what these mean?" he asked, pointing to the pile of

manuals. The gnome said he did. "Then you can show me, and we'll get building," said the prince.

But the gnome said no, only gnomes know how to build from these plans. The plans were much too complicated for anyone other than gnomes to understand. Using those manuals, you could build another palace just like your parents,' he said, with its thousands and thousands of rooms, each one different and richly furnished. But you had to know where in the dozens of manuals to look for every little detail, and how to make every one of the hundreds of materials you'd need. Why, it would take you more than a lifetime to learn how, he said. No, only gnomes know how. You'll need gnomes for each room you build, they'll build the room for you, and they'll have little gnomes that'll build the next room, and so on. Each new gnome will know how to build the next room needed.

He went back into the attic, and within half an hour returned with a little gnome just like himself.

The new gnome went straight to work. He took each manual, used the room's photocopier to copy it from end to end and rebound the sheets so he had a copy just like the original. Then he set to work building. In no time at all he had made another room adjoining the first, everything specified by the plans, even its own photocopier and an attic where he took up residence. And shortly there was another gnome. And another. And soon there were more gnomes, each with its copy of the manuals, all a-building. They seemed to know just where in the manuals to look for whatever they needed. And soon the palace began to take shape.

One day while the prince was resting in his room, he got curious. He knocked on the trapdoor in the ceiling of his room and asked the gnome to come down.

"I don't remember my parents ever mentioning that I'd need gnomes as well as the manuals," he said.

"That's because they never really understood what we did," replied the gnome.

"And I'm not sure I do either," said the prince.

"Tell me, how did you learn where to go for everything you needed in those enormous manuals, at every stage?"

"Oh, I didn't learn it. Nobody could learn that much information. I was born knowing how. You could say, I came with the manuals."

"But every room is different. How do you know what kind of room to build? Where's the plan of the palace that tells you what size and kind of room to build?"

"There's no plan of the palace," said the gnome.

"We just know how by what's happening in the rooms around us. We make our room fit in with whatever that is."

"But what about the plumbing system?" asked the prince. "It runs right throughout the entire building, and keeps growing bigger as the building grows. How do you know how to keep extending the part of it that runs through your room so it serves the rooms further down, beyond your neighbors?"

The gnome opened his mouth, but seemed lost for words.

"And, unlike you gnomes, I visit both wings of the palace, and they're both identical, down to the very last item of furnishing and the sizes of every floorboard and window. How does a gnome working in one wing know what the gnome's doing who's working in the corresponding room in the other wing?

"All this information couldn't be in the manuals

because the manuals are the same in every room, while what's happening in each room is different, and although the manuals don't change, each room keeps changing to fit in with what's happening elsewhere in the palace.

"And..."

The gnome, seeing the prince so concerned, came over and sat next to him. He placed one hand on the prince's knee, with the other he took off his cap. "Look inside my cap," he said gently.

Inside the gnome's cap the prince saw a staircase winding down. He was astonished; he didn't realize the gnome had cast a spell on him so he'd be small enough to look inside. Treading down this staircase he found himself inside an enormous cavern filled with the most extraordinary and wonderful machinery such as he'd never seen before. The whole place hummed with the sound of the thousand engines that powered the machinery so the whole cavern seemed to be alive, shimmering and vibrating. He wandered for what seemed like hours, never seeing the same piece of machinery twice or even recognizing what most of them were for. The cavern inside the gnome's cap was much, much bigger than the old palace had been. It seemed to go on forever.

Suddenly the prince found himself back in his room sitting next to the gnome, who was removing his hand from the prince's knee. "That's how we use the manuals to build the palace," said the gnome.

"But, what's inside you is much more complicated than even the manuals themselves," said the prince. The gnome nodded.

"Then I've got one last question," said the prince. "I understand that a photocopier to copy the manuals is built into the plan for each room and gets

built as part of the room itself. That doesn't seem so surprising. And I can assume that the first gnome arrived along with the first copy of the manuals, right?"

The gnome nodded.

"But how do you…er…reproduce? Where does the gnome for each new room come from, and how does he know which room in the palace he's building? If I knew that, I think I'd understand this palace much better."

At this point, the gnome turned away from the prince and faced over in my direction. "This isn't going to work," he said. I looked around to see who he was talking to. I'd never had one of my characters talk to me directly before. But there was no one but me.

"What did you say? I asked.

"I said, this isn't going to work," he repeated. And then he just stared at me.

The insolence of it took my breath away. "Don't just sit there, make it work." I said.

The gnome got up and walked to the door. He turned. "If you've nothing else for me to do, I'll be going." He paused briefly, then opened the door, stepped through and closed it behind him.

As you can see, I couldn't make the story work. In my tour of the gnome's dungeon I hadn't been able to conceive of the magic needed for building such a palace. I'd written myself into a dead end.

But I still had my gnome. I decided to try again.

When I'd recovered my wits, I vowed to get even with my gnome. Sure enough, a few weeks later I saw in my morning paper a story about a new financier who was taking

Wall Street by storm, with a photo. It was my nefarious gnome. I noted the address and planned a surprise visit.

It was lunchtime. I had positioned myself next to the entrance of the building. Sure enough, in a few minutes my gnome, dressed in an expensive and, I must admit, very flattering suit, came out with two companions. As they walked past me, I called out, "Gnome! Gnome!" He stopped, turned, and faced me. "Yes?" he said calmly.

I said things I shouldn't have said, I know that. After a moment he turned back, murmured a word or two to his companions, and they continued walking. "I'll never use you in a story again," I called after him. Fuming, I returned home.

But I don't know, a gnome that can manage a cell in your body and then go on to run a multi-national corporation, that's a character hard to discard.

I wasn't surprised a few weeks later when the phone rang. It was my gnome. "Things haven't quite worked out for me on Wall Street," he said. "Can I return? Can you find something for me to do?"

He walked in quite calmly and took a seat "You've got to fix it," I said. "There's been no construction since you left. Get to work. Do whatever you have to do!"

Here's where gnomes are useful in stories, particularly gnomes with experience in the financial industry. They're extra smart. You just tell them to do something, and they use magic to get it done.

"Well, don't just sit there," I said. "Get on with it."

"It's already begun," he answered. "Everything's working OK."

And it was, just like that. It all had to do with some wireless doodad he'd brought with him from his job in finance. He'd given one to all the other gnomes so they could work together, all communicating and collaborating, from one and of the building to the other. Once they got going the palace was built in no time. The two wings were near-as-dammit identical. And even as they grew, the plumbing system continued to grow with them, all the time working like a charm.

The End

So that's my secret sauce. Early in the story I refer to the prevailing theory, that development's driven by a succession of chemical gradients, each one inducing the next—I have the gnome say "We just know [what kind of room to build] by what's happening in the rooms around us." I then listed some of the tasks development involves. Then, to test how well that theory accomplishes those tasks I equipped myself with whatever kind of magic I might need to—in this case the gnome's underground workshop. To identify the magic required for a metaphoric solution I draw on creativity sprung into existence by the act of writing.

What mechanism did my gnome story end up with? Not a series of chemical gradients—can you imagine gradients like that persisting in the body of a whale stirring its tissues continuously by swimming and diving? In my story, the development of living creatures from embryos involves communications at a distance among separate minds, those gnomes, each associated with a copy of the genome.

First the story, then the analysis. Could a genome, a mere molecule, have a mind? I don't see why not; our brains are made of molecules yet they each support a mind. And genomes have been evolving for much longer than our brains so

it's hard to conceive of any limit to what they're capable of. In my story, gnomes can communicate from one end of a living creature to another. In blue whales, that's a distance of up to 100 feet. Take that to an extreme, and genomes may be able to communicate with one another telepathically at all levels of the tree of life—from the individual cell up to entire living kingdoms—forming intelligent and creative intelligences at every node.

What is this, that my crackpottery has conjured up? It amounts to an entirely new natural philosophy. Am I offering it as science? Not exactly. I call it an "as if" theory. The way the natural world looks to me, it's as if genomes are intelligent, creative, communicating telepathically, operating as if distributed throughout the tree of life. It accounts so well and completely for how things seem that, maybe we could make it a working theory, even as we accept it's not really true, that the mechanism is "really," say, genetic mutation plus natural selection. NASA does something like this: despite planetary motions actually being shaped by relativity, I'm told NASA still uses Newtonian physics to plot the paths of spacecraft among them. Gravity is their working "as if" theory. And Richard Dawkins didn't really mean genes are selfish, he meant that's the way life looked to him, it was "as if" genes are selfish. My crackpot conclusion isn't so unusual after all.

My crackpottery has kept me engaged for much of my life. What made it endurable? In my experience it's addictive, like gambling; long periods of frustration enlivened by occasional breakthroughs, often coming to me as I write. The gnome in the story above became next a butler, then a mentally-deranged young woman able to see and make friends with the genomes. Extracts from that story I included in a second novel *Me and The Genies*, a romantic comedy that was also a survey of the different ways people think about evolution spanning the range from creationism to physicalism,

another useful self-education in varieties of evolutionary theory. I went on to write four more accounts of what it means we evolved, one of them a self-improvement manual, a 90-minute play, a podcast (*The Chuck Darwin Show* at podbean.com) and several videos in my You Tube channel titled "Evolved Self," my publishing imprint.

There can be a further benefit in being a crackpot, perhaps of greater value though, perhaps, harder to appreciate. To some degree, a crackpot can choose to inhabit the world as he conceives of it. I won't claim that my theories are true, but I can subscribe to them myself if I find them comfortable. To appreciate this, compare the theory of evolution I arrived at with today's scientific theory of evolution. What kind of a creature will they each make you?

According to today's scientific theory, each of us is, and each of our ancestors was, a product of a blueprint that in each generation gets more and more degraded by random damage. But don't worry, the worst-damaged of us in each generation tend to lose out in life's primary drama, our lethal competition with one another for scarce resources, so the next generation consists of the least damaged of us, including any copies of our blueprint that damage may have improved. That's called natural selection. Because our original ancestor was a primitive creature nothing like us, everything we can think of that's human about us comes from inheriting the least-damaged genomes in every generation since. Each of us today is the sum of all that accumulated damage.

What does that say about us? We're adapted to our environment, at least enough to survive in it. And we're equipped to survive lethal competition with one another, at least up to the age of bearing young. Any wisdom and principles we inherit will be only such as these two processes are likely to have generated. Our theory tells us not to expect anything more of ourselves. And, if maintaining belief

in this theory matters to you, shield your attention from any sign that other living creatures are any better than we are—they're not, don't be persuaded they embody any more design or intelligence than you do. If you want to contribute to your species' evolution, take vacations on mountain tops to increase cosmic ray damage to your genes, then submit yourself to the most lethal competition you can, to give natural selection the greatest opportunity for discerning any improvements in your version of the blueprint. That's about all the meaning you can expect from science's mechanism of evolution.

My theory, on the other hand, tells you you're the intelligent and creative product of a supremely intelligent and creative process, in a world containing many other wonderfully intelligent and creative creatures. You are likely to find within you wisdom and principles you share with that process. You can contribute to your species' evolution through close examination of what's wonderful about yourself and other evolved creatures, extracting from it wisdom with which you can enhance your own conscious experiences.

The latter is my world. My most recent book I titled Are You Wonderful? Good Science says, Yes. And 10 years ago, I set up a website "Evolution for the Humanities" to help other creatives and students in the humanities get up to speed in thinking about evolution and practice my kind of writing. The site now houses over 40 reviews of books about evolutionary theory, both classic and contemporary, plus over 100 other articles.

That site, and my writings, are my legacy. And I'm pretty pleased with it all. Life as a crackpot has been pretty satisfying.

Shaun Johnston was born son of a Church of England clergyman in South London. After studying biochemistry at University College London but failing to graduate, he embarked on careers first as a designer in book publishing, in London and Manhattan, and then as a medical writer. After moving from Manhattan to the mid Hudson Valley he exchanged medical writing for web design and publishing, initially launching a series of online travel guides. Meanwhile a lifelong interest in what it means we evolved prompted him to begin writing a series of titles on the subject, including the novels Father, in a Far Distant Time I Find You and Me and The Genies as well as non-fiction including Are You Wonderful? Good Science Says, Yes: How to Tell Good Science from Bad (2020). In 2010, he launched the website "Evolution for the Humanities" as a resource to help non-scientists get up to speed and develop new ways of thinking about evolution. The site offers over 40 reviews from a Darwin-doubter's point of view of texts both classic and contemporary and is an excellent introduction to evolutionary theory. Doubting Darwin has become unorthodox, see