

# The Age of Aquarius

## It's time we assessed the human world from first principles

An excerpt from [The Jolly Pilgrim](#) by Peter Baker

There is a cosmological imperative known as the anthropic principle. It states that any theory explaining the universe must allow for the existence of humans, because if the laws of physics didn't allow you to exist you wouldn't be reading this PDF file. That's clearly true.

What is also clearly true is that the universe must work in such a way that it is possible, in principle, for a species of hyper-intelligent tool-using omnivores to construct a world-spanning technological civilisation, because that's what's happened.

However, it does not necessarily follow that, just because a species of hyper-intelligent tool-using omnivores can exist in the first place, and just because such a species can go on to construct a pan-planetary civilisation, such a venture should – even in principle – be either open-ended or sustainable.

It's possible, for example, to envisage a scenario where a species of hyper-intelligent omnivores appeared on a planet (like we have), developed agriculture and thence civilisation (like we did) and underwent sufficient steps to conceive of, print and distribute PDF files (like the one you're reading), only to later discover that their venture was limited in some way.

The most arresting thing about the situation in which *we* find ourselves is that it appears, at least in principle, to be sustainable, unlimited and completely open-ended.

\*\*\*\*\*

The societies that we twenty-first-century humans inhabit are a phase on a continuum that snakes back into the mists of history and prehistory. Like any story, it has chapters.

**'The most arresting thing about the situation in which we find ourselves is that it appears, in principle, to be sustainable, unlimited and completely open-ended.'**

From where we're standing we can see three of those chapters. During the first, the human world consisted of hunting, gathering and living off nature's rhythms. As a way of life it was stable and profoundly in harmony with the rest of the ecosphere. At the time it must have seemed normal, which I suppose it was. Then there was a transition. Agriculture was invented and human society was transformed.

That transition inaugurated a second chapter from around 10,000 BCE, which is coming to an end about now. That second chapter contained most of the unpleasant aspects of the first one, hardly any of the fun bits and a range of disagreeable new features. Life was hard. Humans were tied to the land. Our darkest urges to exploit and dominate have been given occasion to express themselves. For a time it's seemed normal. It hasn't been.

Now, we're at the beginning of a third chapter. Humanity is entering a phase of bourgeois values, fabulous technology and constant flux. Human society is changing, but we have no idea what into, and it's definitely not normal.

This new chapter has presented us with a challenge: can we find a way to get billions of humans, spread across six continents with diverging world views, to live fulfilled, meaningful lives together in peace and harmony without destroying the ecosphere?

That was always going to be tricky.

\*\*\*\*\*

We should stop judging the state of humanity against a hypothetical standard which only exists in our heads. Humans are not peaceful star fairies. We're a species of impetuous and hormonal primate that has crawled from the mud and pandemonium of Earth's ecosystems to construct, without any guidance, a world-spanning civilisation.

**'The remarkable thing isn't that we're beginning to get quite good at running civilisation, but that we're managing to do it at all.'**

Our evolutionary heritage has left us with a variety of psychological idiosyncrasies which are deeply unhelpful when one is attempting to undertake such a venture. Civilisation is forcing us to deal with unprecedented and extremely complicated tasks (such as coordinating economies and managing planetary climates) which are completely alien to minds evolved to think about food, status and sex. The solutions are having to be worked out, and refined, generation by generation and step by painful step. The industries, cultural traditions and political institutions we've developed to deal with them were not meticulously planned or carefully designed. They were cobbled together on the fly. Their quirks mirror our own.

The saga that brought us here was messy. We're carrying a lot of historical baggage. People believe, and do, really weird things. We've got some strange institutions and a lot of very serious problems. But, given how we reached this point, to wish things were different is the same as wishing you lived in a different sort of universe. The remarkable thing isn't that we're beginning to get quite good at running civilisation, but that we're managing to do it at all.

And now something new has started to happen: we're beginning to understand our own context. Our ancestors a millennium ago didn't realise that they were carbon-based life forms who'd been generated by a billion-year process of evolution in parallel with the rest of the biosphere. When they complained about the kings who lorded it over them, they didn't grasp the mechanics of the evolutionary psychology which had hammered those behavioural patterns into DNA inside every cell of those kings' bodies. When famine tore through their societies they didn't perceive the forces of demography which were aligned to guarantee such catastrophe, nor that the pox which struck them down was the consequence of their forefathers' enslavement of cattle. When the conquistadors swept away the Inca with steel and microbes, neither side understood the great tapestry of historical forces which had shepherded them to that point.

Our ancestors were not in a position to understand the path they were following or, in most cases, even that they *were* following a path. But we are. Unlike them, we can be realistic about who we are, how we came to be here and what's happening to us now. If one assesses humanity's situation in those terms, things really aren't so bad.

\*\*\*\*\*

Most of the major challenges our species faces are unavoidable parts of the gig when creating a pan-planetary civilisation from scratch. How exactly we'll meet those challenges are questions with which we now wrestle, but the underlying mechanics of how the human race, this planet and this universe work means that there's every reason to believe it can be done.

**'It's not like we have any alternative to being carbon-based life forms in this universe.'**

That, in and of itself, is kind of strange. Humans didn't evolve to run sustainable civilisations, so there's no particular reason to suppose we should be able to. Looking through the fossil record reveals no trace of earlier beings treading this path. Our situation appears to be unique.

No matter how much we love to complain about our glass being half empty, it's not like we have any alternative to being carbon-based life forms in this universe. Given that, the underlying parameters (defining how tough it's going to be to construct a harmonious civilisation which survives into the distant future) could have been far worse.

For example, we tend to see our fossil fuels situation in terms of the substantial problems it's causing us. Yet overall it was rather handy that, just when we needed an energy boost in the eighteenth century, we could make use of all that coal and oil which had been conveniently lying around in the Earth's crust (for when a bunch of civilisation-building omnivores needed something to power their steam and internal combustion engines). Despite their grubby politics and world-warming side effects, those fossils turbocharged civilisation and allowed us to power up the industrial base needed to cultivate the next generation of energy technologies. Horse-drawn ploughs and wood stoves would not have got us as far and as fast as tractors and coal-fired power stations (and they would have seen the end of a lot more trees).

Ultimately, we're lucky to live on a planet with biological and geological systems which lay down a store of easily accessible energy for when the relevant level of technological development was achieved. Global warming is the dark lining on a cloud which has been strikingly silver for the human race.

**‘Global warming is the dark lining on a cloud which has been strikingly silver for the human race.’**

Then there's our race problems. We think of ourselves as having big issues with race and racism. Yet, regardless of how much fuss is made over skin colour, the bottom line is that the actual racial differences between humans – genetically speaking – are trivial. But that's only because of several accidents of history. As recently as 30,000 years ago the world was full of genuinely different hominid species. Had the geographic quirks of Earth been slightly different we might – right now – live in a truly multiracial world. That would introduce moral complexities far more confounding than the ones we actually face. As it is, there's no underlying reason we cannot move forward as a single, self-contained and unified species.

Several of the psychological idiosyncrasies bestowed on us by evolution are also beginning to look rather convenient. For example, our craving for status, which has led to so much gratuitous bauble collecting, looks like it will ultimately save us. It's driving the open-ended economic growth which is, in turn, driving our accelerating technological progress, which is the only thing that's going to transform this currently non-sustainable civilisation into a sustainable one. The ants and termites might not have had the destructive wars we've had, but will they ever be competitive enough to design hydrogen fuel cells?

Then there's this paradoxical aspect of human psychology whereby (contrary to what one might expect) as societies grow richer and more self-determined, people have fewer children. It's already driven a demographic transition in the large majority of Earth's human populations. Yet it's possible to imagine a scenario (if humans were, for example, psychologically more akin to rabbits) where we could never learn to live without either population booms and busts, or draconian population controls. Either of those scenarios would make our potential futures look a great deal less fun than they actually look.

**‘It's presumably plausible that a species could think up farming and the internal combustion engine, without ever having the mental oomph for quantum mechanics ...’**

There's also the fact that we humans are, to put it bluntly, remarkably clever. It's presumably plausible that a species could think up farming and then the internal combustion engine, without ever having both the mental oomph for quantum mechanics and the organisational aptitude to give some of its members the head space for the required contemplation.

Now we understand more about genetics, we understand that our genetically (more or less) identical ancestors could *in theory* have been doing all the crazy stuff we do for much of the past hundred millennia. The reason the guys who painted the Lascaux caves in France 17,000 years ago weren't designing space shuttles was not due to their intellectual limitations, but because there were no universities to teach them astronautics; no giants on whose shoulders to stand. The burning question, therefore, is what marvels lie before us that *we* just haven't got round to yet?

Our ancestors lived through a baptism of bedlam and chaos. Yet the mental peculiarities which made them do so many frivolous things – and dragged them through ages of exploitation, poverty and war – *ultimately* manufactured a situation conducive to the running of a long-term technical civilisation on a planet.

How much of that was due to luck and how much due to some sort of inevitable evolutionary conditioning that takes place when hyper-intelligent species evolve on planets, we're not yet in a position to say. But I'll tell you what I think. I think Shakespeare had it right.

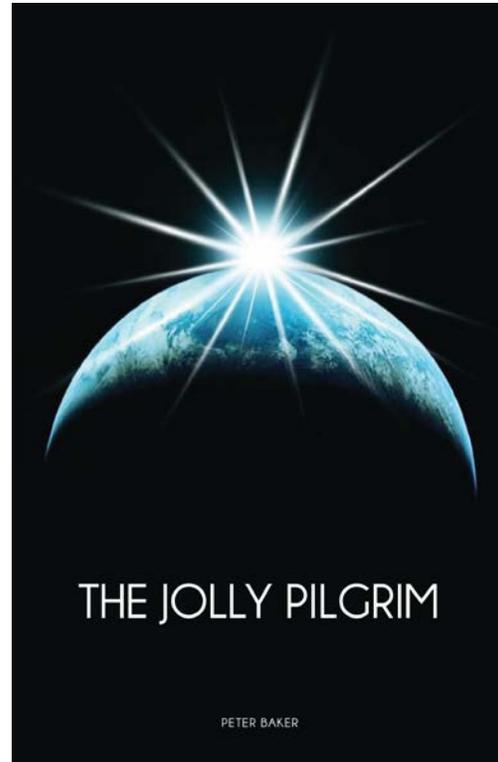
Noble in reason, infinite in faculties, express and admirable in form, in action like an angel and in apprehension like a god. Let's face it, we're amazing.

\*\*\*\*\*

Now we can see human civilisation in context, rather a lot about the general shape of its story over the past 12,000 years looks kind of inevitable.

Once we'd stumbled into agriculture, the (relatively) limited nature of the human experience during the subsequent epoch was probably more or less guaranteed by the egocentricity of humans and the realities of population growth, agricultural productivity and technological progress.

Those 12,000 years were a really difficult period to be a human. Very few people got to be kings or philosophers. For the vast majority it was the unforgiving grind of subsistence agriculture. One would not have consciously chosen such a life over the freedom of hunting and gathering which our prehistoric ancestors once enjoyed. It was a path we stumbled upon, then got trapped in. It's only with the amount of hindsight now available that it looks like an audacious and exciting move for us to have made as a species.



But the guys who slogged through those toil-filled ages (to whom I, for one, am eternally grateful) didn't know that it was going to lead to *this*: this modern world where most of us get to live for 70 years, nearly all of us can read, we've got computers and books and flying machines and, instead of just struggling to survive, we can travel across our home world and ponder 5,000 years of collected human wisdom.

In addition, as trial and error teaches us how one does, in fact, organise billions of people on a planet, we're starting to glimpse what the broad shape of a long-term civilisation will look like. There's good reason to suppose that this dawning millennium will be considerably more inviting than the last one.

Law and order work better than anarchy. When people are free to follow their interests, society is more vigorous, dynamic and interesting. Governments are more effective when they're afraid of the people, rather than the other way around. Once one person (or a small clique of people) is stopped from stealing the whole cake, the cake gets larger, and a good deal tastier.

No matter how long self-selected cliques in certain parts of the world continue to kid themselves to the contrary, no human, or small clique of humans, is ever going to be mentally equipped to direct the affairs of a country. Because that's true there is only ever going to be one practical system available for governing human civilisation over the long term, and it's not dictatorship.

The mechanics of our geopolitical adolescence have also played out so as to produce this intriguing game-changing shift in the parameters constraining what is, and is not, a feasible system for organising civilisation.

Billions of apes don't take over a planet unless they're fighters. Original parameter: No fighting instinct = no planet to play with.

But that feature of the human psyche now makes the status quo unstable. The make-or-break tasks we now face (such as planetary climate management and not blowing ourselves up) require, as a prerequisite, cooperative behaviour across the whole species for the foreseeable future. New parameter: Keep fighting = no planet to play with.

There is no rule book which says that civilisation-building species reach a point where they face a choice between cooperation and suicide. There's no rule which says that systems of government which are equitable and morally realised are more practical than ones which are not. Yet, as it happens, those things do appear to be true.

But the most mystifying and glorious thing of all about this path which humanity has stumbled onto is that – if we will it so – there never need be an end to it.

\*\*\*\*\*

The laws governing how reality works are too complicated for humans to figure out by casual observation. But, once we'd realised that they could be figured out, we were more than mentally up to the job.

**‘This universe not only allows apes to exist, but it works in such a way that, once they start talking, cooperating and working things out, ever greater dimensions of wonder and experience open up.’**

What's more, those laws are arranged in such a way that the conceptually easy bits (such as Newtonian mechanics) prepare you for the far-out abstract stuff (like Einsteinian relativity). If we'd had to work out the general theory of relativity as our first mental jump there's absolutely no way we'd ever have made it. But several easier jumps came first and, once we started making them, we got onto a roll.

We take technological and scientific progress so much for granted nowadays that it's easy to forget how marvellous it is that the universe *allows* such progress. We might have lived in a cosmos that was limited or limiting, but we don't. This universe not only allows apes to exist, but it works in such a way that, once they start talking, cooperating and working things out, their world spirals upwards and ever greater dimensions of wonder and experience open up.

Our preconceptions about where this path might be leading are largely defined by four generations of science-fiction writers. Their imaginative achievements blind us to how profoundly and comprehensively enigmatic the future is.

To set humanity's situation in fundamental terms: the laws of nature, the geographical realities of planet Earth and the psychology of humankind have conspired to generate a state of affairs which is open-ended, utterly mysterious, unlimited and becoming more interesting with every passing century. Even in my wildest imaginations I can think of absolutely nothing more beautiful, more sublime and more perfect than that.

**The above is an excerpt from [The Jolly Pilgrim](#), by Peter Baker.**

**The book is a sex, drugs and rock 'n' roll travelogue extravaganza, which also contains philosophy. It's available in all major ebook formats and from [Amazon](#).**