

Introduction

Al-Qaeda Goes to Hollywood

The two men are chained by the ankle to drainpipes in a squalid bathroom. Each wakes up with a Mickey Finn hangover to find he has a hacksaw at his side. Their faces are pale, full of fear and confusion. Between them is a corpse lying in a pool of blood, a pistol in one hand, a tape recorder in the other. A taped message tells one of them that if he cuts off his foot with saw, crawls to the pistol in the corpse's hand and shoots his fellow cellmate, he and his family will be spared death.

In an unappetizing hotel room in Baghdad, my makeshift home for the past two and a half years, a bootleg DVD is playing on the television. *Saw* is a gut-churning example of Hollywood psycho-horror, but there's not much else to do in the evenings here, except drink, spout bullshit and watch endless pirate films from Asia, the start of each screening inevitably blurred by silhouettes of Thai cinema-goers slipping late into the theatre. Lying here on my bed, with the antediluvian air-conditioning unit clattering behind me, the question crosses my mind: how did al-Qaeda tap so directly into the Hollywood psyche? Because out there in the city, beyond the blast walls that protect me from the car bombs where human beings explode every morning, waking me before my alarm even has time to count down to eight o'clock, the terrorists are doing this to real people. I've seen the beheading videos, watched the hostages – Americans, Britons, Koreans, Lebanese, countless Iraqi soldiers and officials – forced to endure a similar hell. Told to beg to their governments for their lives, issuing demands on behalf of the masked psychos filming their terror, while all the time knowing, somewhere behind the desperate cooperation, they will never be allowed to go free. Knowing with instinctive certainty that once the orange jumpsuit is on, the slow knife hacking their throat is the only way out. A skinny young Korean translator paces up and down a cell somewhere in the Sunni Triangle, or perhaps in the

Triangle of Death (for some bizarre reason, doom is always packaged in triangles in this country). Then, in front of the video camera, a blindfolded Kim Sun-Il, who had been snatched in Fallujah while working for a South Korean supply company, howls and cries like a little kid, screaming: 'I don't want to die, I don't want to die,' begging a government that is completely helpless to deliver him from this evil. The masked men butcher him anyway on film.

Probably all of these victims watched the vast Hollywood blockbuster that al-Qaeda engineered on September 11, 2001, the terrorist ratings spectacular to beat all others. At least one of them, we know now, witnessed it first-hand: watching the planes demolish the New York skyline inspired him to come to Iraq. Now here they are, as a direct result of that day, living out their own nasty little B-movie sequel, the straight-to-video, low-budget gore flicks that followed, and which are peddled for less than a dollar in the sand-blasted shops of the Sunni Triangle. *See Infidel Die A Horrible Death Parts I, II and III.*

Somewhere just out there I could be an extra in this horror movie, I know. Just let my driver take a wrong turn, go out on the wrong story and you're there, man. The star of your very own snuff movie, universally available on the internet, next to the free-porn downloads of girls giving blow-jobs to horses and the voyeuristic footage from college girl spy-cams. For anyone in Baghdad, the horror is just a wrong turn away in a town where no one can be trusted. Just a click away for everyone else sitting out there, bored in front of their computers in suburbia.

In Hollywood, they pay people with grotesque notions about human behaviour to transform their ideas into these movies: a form of therapy, perhaps, externalizing the horror for the director and the audience, indulging their morbid fantasies on celluloid rather than in human flesh. Out here, in Iraq, they do it for real. What do the two have in common? Only this: the limitless but all too predictable human imagination, and the need for a story.

It occurs to me lying here, that's all that religions and movies are: a series of often gory stories, fables told to take the poor, isolated, individual sap out of himself for a little while, let him forget he is all alone in the universe, while sitting there in the flickering lights of the darkened temple or movie theatre. In religion, we're all extras in god's everlasting extravaganza.

In Hollywood, we're just the audience. And therein lies the problem, I think: two narratives competing for the same audience. Perhaps that's why the Islamists of Hamas torched all the cinemas in Gaza, why the Shiite militiamen of Basra burn down DVD shops, why the religious right in America rants against Hollywood. Hollywood is considered 'unfair' competition in the market for the human imagination. After all, what religion these days has the razzle-dazzle to compete with Hollywood and its Computer Generated Imaging miracles? Well, now one of them does: only the new epics and the endless snuff movies of this purported faith are audience participation, open to anyone, any time. Not for profit, but for god.

Or perhaps I've just been in Iraq for too long.

Al-Ara Hotel

Baghdad

Now here's an important question. Think carefully about it, as your life may depend on the answer one day. Should a goat wear underpants?

As crazy as this may sound, this was a policy point for the newly declared Islamic State of Iraq, the reborn caliphate proclaimed by al-Qaeda in Iraq in early 2006, whose main policy goal was to take the Sunni lands of central Iraq back to the good old days of the Prophet Mohammed in seventh-century Arabia. A similar project to turn back the clocks had been tried in Afghanistan by the Taliban and their al-Qaeda allies, and had for a while succeeded in creating a miserable, brutal place, much as Arabia probably was 1,400 years ago when Mohammed and his neighbours were fighting over which imaginary deity should be revered as ruler supreme of the universe. Their safe haven ruptured after the US invasion of Afghanistan, the Sunni extremists – a mixture of fundamentalist strains such as Wahhabis and Salafists, collectively known as *takfiris* – were establishing the same model in the green farmlands just north of Baghdad.

I first came across this brand of off-the-chart extremism in 2005, while reading a local news report in Baghdad about a grocer's shop that had been blown up. The four people who worked there were executed in front of their vegetables before the TNT was set off. I didn't realize that they had been murdered because of their vegetables.

'Now what the hell have people got against greengrocers?' I asked Ali, who was sitting in the office, fiddling with a broken computer. I already knew that hairdressers had been targeted for more than year because fundamentalists objected to them giving western hairstyles, especially US military-style buzzcuts. Most barbers, threatened with death if they shaved beards in un-Islamic styles, had packed up shop or operated in secret in their homes to a discreet clientele. And of course alcohol sellers had been blown up by Shia gangs since just after the invasion. Recently, gunmen also had taken to shooting mobile-phone vendors who sold western pop jingles as ringtones. And a few satellite dish salesmen had also been slaughtered for allowing western programmes into the pure Muslim lands. But greengrocers?

Ali was giggling at my question. 'You know, you'll think this is crazy, but I heard that the Mujahedin have issued a fatwa that tomatoes and cucumbers can't be displayed together.'

‘No way! Why? Because cucumbers look a bit like a cock and tomatoes look like breasts?’

‘Yeah, basically,’ he said. ‘Tomatoes represent femininity and cucumbers ... well, you said it,’ he laughed.

This really took the biscuit, even in a war being waged in the name of such bizarre ideals as rebuilding a seventh-century desert empire. I rushed next door to the office of National Public Radio, and told a friend of mine this new gem of utter ridiculousness. He too was amazed, but his translator Saad, a Shia who had lived in western Baghdad until being recently chased out of his home, just nodded.

‘I’ve seen the leaflets,’ Saad said. ‘Tomatoes and cucumbers cannot be displayed together. You can still sell them, but they can’t be seen together.’

It was astounding in its stupidity and barbarity. I knew these guerrillas were manically repressed sexually, but this had descended to a juvenile level comparable only to Benny Hill. It reminded me of the worst Victorian prudes who would have covers made for their table legs because legs of any sort were suggestive of sexuality. I didn’t know the most extreme examples were yet to emerge, however.

As Iraq effectively fragmented into its constituent parts – a Kurdish north, a Shia south, Sunni west and centre, with a lethal maelstrom of mixed sects killing each other in Baghdad – al-Qaeda and their local affiliates had decided to take advantage of this centripetal force and declare their own breakaway caliphate in 2006. Now they had started enforcing their brand of puritanism in Diyala, a province of verdant farms, canals and rivers just northeast of Baghdad. It was perfect guerrilla warfare territory, and it was here that the jihadists concentrated their efforts to carve out an Islamic state.

There was no public decree of the new laws, but soon everyone seemed to know them. In Iraq, there was a constant swirl of rumours and speculation, repeated from neighbour to neighbour, town to town, so one had to be careful about what to believe. But I knew a freelance

Iraqi journalist operating in Diyala who had reliable links to both Sunni and Shia militants, so I asked him to find out what the new rules in al-Qaeda-controlled Iraq were. When he got back to me a few days later, I realized that the country really had gone through the looking glass.

From Baqouba, just north of Baghdad, to Samarra, halfway to Mosul, vegetable sellers had not only been warned against selling cucumbers and tomatoes side by side, but had also been cautioned to sell bananas only in plastic bags to avoid offence. In addition, the production and selling of ice – which had been a boom business for years, with electricity in such short supply – had also been banned. The reasoning was that in the Prophet's day, there would have been no ice in Arabia and he would not have drunk chilled water. So nobody now could have any, which was unfortunate, since anybody so afraid of bananas was clearly so sexually frustrated that putting some ice down their trousers might have helped matters.

Also, the Mujahedin had gone one further along the no-alcohol line by banning smoking. This was not strictly for health reasons (as shown by the punishment, which wasn't a giant nicotine patch but instead involved inserting the smoker's index finger into a metal pipe and snapping the digit at the knuckle), but because Muslims are not supposed to harm themselves: clearly there were plenty of people out there ready to do that for them. Tobacconists had their shops torched and smokers had to have a quiet puff at home if they couldn't give up. Quitting the habit was not so easy in such trying times, either.

But the granddaddy of all the crazy edicts concerned the goats. Our man in Diyala confirmed a persistent rumour that goatherds had been ordered to put underpants on their animals for modesty's sake, as clearly an inflamed young jihadist who had never seen an unveiled woman might feel unduly aroused by the site of a goat's nether regions. Sheep, it seemed, were exempt since they have big flat tails that cover their genitals.

It was too weird for it to be true, I thought, so I asked Mohammed the translator to ask around independently to see what was really going on. Mohammed had a friend working as a doctor in Baqouba hospital, and asked him if he had seen any strange ungulate fashions in the

fields of Diyala. As it turned out, the doctor had experienced a potentially deadly brush with goats' underclothing.

The doctor had been travelling in a taxi minibus from Baqouba through the rich, guerrilla-controlled farmland to Baghdad. Passing through one village, he had spotted a goat wearing a pair of boxer shorts.

'I started laughing,' he recalled over the telephone, asking us not to divulge his name. 'It was a goat wearing boxer shorts. And a very nice of boxers they were too. But then the other people in the taxi van said, "Stop laughing, or you'll get yourself killed."' Facing such a choice, he quickly managed to contain his mirth, and lived to tell the tale.

In 1843, Karl Marx famously described religion as the opium of the people (or, as Joe Strummer put it more lyrically in 1980, 'The message on the tablet was valium'.) I have nothing against that: everyone needs a little opiate now and then to relieve the heavy burden of consciousness, the knowledge that one day we and everyone we know and love will die. Even baboons have been known, in times of plenty and with no predators around, to escape boredom and baboon angst by chewing on natural herbs that give them a slight buzz.

It is when the mild opiate of mainstream religion is distilled into the crack cocaine of fanatical fundamentalism that the problems really start. Iraq was quickly becoming ideology's answer to a vast methamphetamine factory in the desert.

It seems that when American military planners pondered how quickly democracy would take root in Iraq, allowing them to declare victory, bring their troops safely home and start pumping the country's huge oil reserves to lubricate the global economy, they failed to consider that Saddam's Iraq was a carefully constructed vacuum in which perceptions of reality – except

the reality of the daily struggle not to starve, be tortured or be killed – had been completely warped. When the thin needle of American steel burst the bubble, a pandemic of weird ideologies, long-suppressed fears and carefully nurtured paranoia erupted. Thus it was that before too long you could be murdered for the wrong hairdo, risk your life for a Greek salad or be forced to put panties on your livestock.

‘Custom is king of all,’ wrote Herodotus in *The Histories*, his compendium of tales of strange customs in the Aegean and eastern Mediterranean two and a half thousand years ago. In some respects, little has changed – there are still weird and colourful communities living according to time-worn tradition, barely touched by the industrial sheen of modernity. Understanding their stories is often vital to knowing what makes them do the things they do, and how they may react to new influences. This is known in the jargon of international studies as ‘a strategic narrative’, the story we tell ourselves – and our enemies – of who we are, what we want and what our society deems acceptable, desirable and reprehensible. These stories, often distorted and almost always written from the victor’s perspective, give us a sense of self.

Somehow, America’s war planners seemed to have ignored the warning of *The Histories* and assumed that ancient Mesopotamia, crisscrossed with one of the longest, most violent histories in the world, was a blank slate on which they could freely write their own history, as their forebears had liberally rewritten the conquest of the Native Americans as a thrilling adventure tale. They were wrong.

Worse, George Bush apparently thought the Middle East was a Gordian knot to be hewn in one brief, decisive stroke: he did not realize that intervening in the region’s politics is akin to performing brain surgery, in which any false cut of the scalpel leads to scar tissue and a violent reaction elsewhere in the body politic.

Had the Americans shown a little more interest in Herodotus’s bizarre tales, it might have helped them in Iraq. It might also have helped them see the similarities between themselves and the country they were fighting for.

For al-Qaeda did not have the monopoly on fire-and-brimstone rhetoric. Shortly before he unleashed his massed army from Kuwait, President Bush was forced to dismiss the man he had appointed as Deputy Undersecretary of Defence for Intelligence, Lieutenant General William G. Boykin. The devoutly Christian general had made the mistake of publicly admitting his religious interpretation of the battle he had fought in Somalia with a Muslim warlord a decade before.

‘I knew my God was bigger than his. I knew that my God was a real God and his was an idol.’ Which is essentially what any adherent of a monotheistic faith has to believe.

General Boykin lost his job for merely being honest about what he believed. I once heard a marine lieutenant in the unit calling themselves the Crusaders express exactly the same view, while we were being mortared in the ruins of an ancient Assyrian city in the Triangle of Death. And he really believed it. Probably Mr Bush believes it too. After all, he once told Palestinian Prime Minister Mahmoud Abbas that he was under marching orders from God.

‘God would tell me, “George, go and fight those terrorists in Afghanistan.” And I did, and then God would tell me, “George, go and end the tyranny in Iraq,” and I did,’ he said, according to senior Palestinian officials. Mr Bush didn’t say exactly how God was communicating with him, whether it was voices in his head or if the decree came in the form of writing on the wall. Either way, when he described his ‘war on terror’ as a ‘crusade for liberty and democracy’ shortly after the September 11 attacks on the United States, it didn’t take the Muslim world long to decide that this was more than a mere metaphor.

But then, such sentiments were far from uncommon in the Middle East. Iran’s president, Mahmoud Ahmedinejad, and Iraq’s first elected prime minister, Ibrahim al-Jaafari, both claimed to be acting on God’s instructions.

Creatures of the Id

Why We Fight

There's never been anything, however absurd, that myriads of people weren't prepared to believe, often so passionately that they'd fight to the death rather than abandon their illusions. To me, that's a good operational definition of insanity.

Arthur C. Clarke, *3001, The Final Odyssey*

Something was killing Commander John J. Adams's men. It was silent, unseen and apparently unstoppable. Adams's squad had been dispatched on a special mission to locate missing nuclear scientists, only to discover upon their arrival that all but one were already dead. Investigating the killings, they soon found that their own security perimeter was being infiltrated by unseen attackers, who would rip men to pieces with terrifying sudden force.

This was not Iraq in 2004, and the killer was not an Iraqi IED team or a jihadist disguised as a soldier, walking into an American mess hall with explosives strapped to his body, although such scenarios were played out in Mosul and Baghdad. In fact, this particular story occurred on the made-up planet Altair in some unspecified future imagined by Hollywood in 1956. Commander Adams was the inimitable Leslie Nielsen, who would later gain fame in a series of spoof action movies, such as *Airplane*.

Unlikely as it may seem, with its Technicolor sci-fi effects, tight-fitting jumpsuits and the clownish Robbie the Robot, the movie *Forbidden Planet* does bare an uncanny resemblance to the Iraq conflict. So, for that matter, does the whole 'war on terror'. For the invisible monster

that is killing the Americans in *Forbidden Planet* is not an alien or a rogue scientist: it is a creature of the id, a monster generated inside the head of the last remaining scientist on Altair, Dr Edward Morbius. Dr Morbius has discovered that a long-lost civilization once inhabited Altair, and has left a powerful machine that transforms the user's subconscious fears into actual physical creatures: the doctor doesn't even realize that his own worries about his attractive, scantily clad young daughter being wooed and lured away by the dashing Commander Adams from his idyllic Garden of Eden has triggered the lethal attacks on the American servicemen. The horrific creature that wreaks such mayhem and bloodshed is a figment of the imagination, made flesh by an ancient, poorly understood device.

Our world is populated by these 'creatures of the id': they are the monsters, demons and angels that propel so much warfare, the genies and supernatural deities leaping from the pages of ancient texts to play on our darkest fears, shaping our identities and destinies.

As someone who does not believe in God, it was both shocking and fascinating to travel through war-torn countries and see the absolute chaos that these make-believe gods and monsters cause. Looking at people who will blow themselves up in the name of Allah, drive others off their land to fulfil a 3,000-year-old prophecy of Yahweh, or back one side or the other in the hopes of inducing a long-awaited Armageddon, I have spent hours wondering how people can not only believe such things, but kill and die for them.

There are now countless books arguing against the existence of god or gods: many of them are compelling and gripping, but will do little to dent the faith of people who will only ever read one book in their lives, and will devour that one unquestioningly. What really has come to obsess me is how we got to this point, a world in which ideas and imagined concepts are like a pathogen that leaps from mind to mind, mutating and

'The only true villain in my story: the oversized human brain,' says Leon Trotsky Trout, the ghostly narrator of Kurt Vonnegut's 1985 Armageddon novel *Galapagos*. The book tells the story

of a ragtag group of holidaymakers who are shipwrecked in the islands six hundred miles off the coast of Ecuador during a luxury cruise, while financial crisis and disease wipe out humanity in the rest of the world. The book's dour narrator happens to be a decapitated shipyard worker who haunts their vessel. From his strategic, disembodied viewpoint, he observes the end of humanity while lamenting that the human brain has become far too big for its own good, an evolutionary adaptation that is as impressive, but ultimately as impeding for its owners, as the huge antlers of the extinct Irish Elk. With its capacity to develop ideas – in effect, make stuff up, and then believe its own stories – the brain has become as much of a hindrance as a helpmeet to mankind. In a wry twist, the last survivors of humanity slowly evolve back into an animal state and survive in the form of highly intelligent seals.

A decade later, Vonnegut seemed to contradict himself in his last novel, *Timequake* – the problem was now perceived by the curmudgeonly narrator as humanity not using its brains enough, instead choosing to immerse itself in banal daytime television shows and the lives of fifteen-minute wannabe celebrities, refusing to use its awesome capabilities.

Perhaps both views, though contradictory, are true: the human brain has developed some spectacularly self-destructive proclivities over the millions of years in which it has evolved the ability to build space stations and cure a multitude of diseases. But with the technical virtuosity, we have developed a feverish imagination that tends to populate the world around us with powerful spirits that drive us to seemingly insane acts. This is more than just over-zealous religious fervour or naive incredulity: when gods were shunted aside by science in the modern age, people quickly replaced religion with a ferocious series of secular ideologies – nationalism, Nazism, Communism – that led to even worse destruction. Little wonder then that the tormented human mind numbs itself with afternoon chat shows and *Judge Judy*.

How did this happen?

There has been a flurry of research in neuroscience and biology in recent years to suggest that there is an intrinsic predisposition in the human brain to believe in god. In fact, such studies

suggest that religious belief may in fact be hardwired into the architecture of our brains. God may well be, ironically, a by-product of evolution.

One theory has been put forward by Lewis Wolpert, a British developmental biologist, in his book *Six Impossible Things Before Breakfast*. The title comes from Lewis Carroll's *Through the Looking Glass*, in which the White Queen urges Alice to believe in the unreal. 'When I was your age, I always did it for half-an-hour a day. Why, sometimes I've believed as many as six impossible things before breakfast,' the White Queen boasts. It is an apt title for Wolpert's study, which traces how early hominids, forced out of their ancestral lifestyle in the African forests by climate changes, started using basic tools such as sticks for breaking shells, sharp rocks for cutting animal hides and stalks of grass for extracting succulent termites from their nest. Chimps still use such implements.

Those prehistoric ancestors with a better understanding of the use of such tools prospered over the millennia, as they could get more food and provide for the survival of their offspring. The same ability to make, use, and eventually manufacture tools eventually led to the manufacture of weapons with which to vanquish their enemies. This evolution therefore favoured those with an understanding of cause and effect: if I want to eat this, then this is the tool I must use and this is how best I make and employ it. As that understanding of causality developed, so did the tools themselves, allowing mankind to develop the technology that would help him dominate his surroundings and rise above the traditional constraints of his natural environment. Those parts of the brain – mainly the prefrontal cortex – associated with cause and effect steadily grew towards Vonnegut's bloated villain of the *Galapagos*.

Because alongside this newfound skill in tool manufacture, another, less obvious development was taking place. Functions in the brain are not ring-fenced off from each other. The toolmakers' search for cause and effect naturally spilled over into other problem-solving areas of the human life. Among those were the eternal questions of why we are here, why we die, what causes volcanoes and droughts and attacks in the dark by ferocious beasts. Our precocious ancestors started to seek a cause, an agency, to explain the world around them, and solve these

problems as they had solved so many technical challenges. If we were here – an obvious *effect* – there must be some *cause*, some agency that put us here. And if we were put here, there must be a reason. Thus began man's search for meaning.

With this crude but brilliant basic set of tools, an unseen twin to our early science was born: an innate predisposition to believe in beings beyond our ken that could neatly explain life's untold mysteries.

The predisposition to innately understand cause and effect has been demonstrated in human babies, who in experiments will expect a ball that is rolled up a slope to naturally roll back down. Animals mostly lack this inborn understanding, the result, biologists argue, of millions of years of our frontal lobes applying our grey matter to solving complex problems.

Some biologists argue that religion has done as much good as harm throughout our history, bringing down our stress levels, providing a key sense of community in the face of an often hostile natural environment, and even at crucial moments ensuring our survival. Belief in the great beyond gives members of the same tribe the strength to sacrifice individual members for the good of the community, allowing the greater number to survive and reproduce.

Robin Dunbar, in his book *The Human Story*, points out the surprising fact that Neanderthals actually had larger brains than our Cro-Magnon predecessors, with whom they shared the great forests of Europe until around 40,000 years ago. While the Neanderthals' advantage in brain size may have made them better hunters, their expanded cranial capacity was not in the key frontal lobes of the brain, the genie's lamp whence our spirits appear to have been conjured. Instead, Neanderthals carried their extra capacity at the back of their heads, giving them enhanced eyesight. They were probably far more adept hunters, and may well have understood their environment better. But the creatures of the id had already arrived on the scene, probably in the guise of tree and animal spirits summoned up by Cro-Magnon shamans.

It is not hard to imagine those big-brained Neanderthal hunters, at ease in their natural surroundings, lurking in the dark woods of Europe and watching the Cro-Magnons' crude

spiritual rituals. Perhaps as they observed the drunken figures shambling around a bright fire, they frowned in curiosity or smiled at the strange and colourful beliefs of their rather inept, often brutal neighbours. If they were capable of expressing coherent thought, perhaps they would have muttered to each other: 'Look at these schmucks, they won't last long.' Yet those individualistic Neanderthal hunters were eventually driven to extinction by their neighbours. Their last remains, dating from some 24,000 years ago, were found in the caves of Gibraltar, which appears to have been their final holdout against the encroaching spiritualists. Just a few hundred miles to the north, the Cro-Magnons themselves eventually found refuge in the mountainous Basque country of northern Spain. There they weathered the explosive advance of the agriculture that another branch of their own family tree had developed in northern Iraq.

The genie was long out of the bottle by that point.

A biologist friend of mine once suggested another theory of how the spirit world might have slowly drifted into our daily lives. As early humans' brains developed the capacity to retain ordered memories, they may well have been troubled by vivid dreams they had no way of explaining. Animals would either not have such dreams, or would forget them upon waking. What must those primitive forest dwellers have made of dreams in which they appeared to see dead relatives mysteriously rising before them, perhaps even communicating with them as they had done while alive? As any child knows, dreams can sometimes seem as real as our waking experiences. How could these people, with no rational explanation of the world, incorporate such experiences into the way they understood the world? Of course, with a brain already inclined to believe in supernatural agents, they may well have had reason to believe that the dead lived on. And if people survived the experience of physical death, there were clearly other planes of existence beyond that which they saw every day while out hunting deer and gathering berries. From the dreams of cavemen would eventually arise vast Gothic cathedrals and golden-domed mosques. The same evolutionary tool that gave us the ability to travel in space gave us the ability to dream up endless permutations of the same themes, across cultures and civilizations that never even saw one another.

There is a common argument that god must exist, since such disparate human communities spread around the planet all believe in supernatural spirits. Surely a more reasonable explanation is that we all experience the world through the same awesomely imaginative lens of our brains?

And of course, belief in god and space travel are far from incompatible. Those early pioneers of astronomy, such as Galileo and Kepler, were themselves deeply religious men who half expected to glimpse the divine visage looming in their telescope lens while scouring the night skies. That spirit persists in many parts of the world today: witness these extraordinary instructions by one Dr Zainol Abidin Abdul Rashid, of the National University of Malaysia, on how Muslims in space should orient themselves in order to pray towards Mecca's holy shrine, the Kaaba, that black box recorder of a religion's yearnings.

As trips to space become commonplace, human civilization will no longer be tied to the surface of the Earth. But Muslims, wherever they are – whether on Earth or in space – are bound by duty to perform the obligations of worship.

A Muslim who wants to travel must study the techniques of determining prayer times and the direction of the Qiblah (the direction of prayer, facing Mecca) ahead of travel in order to achieve complete worship. I will elaborate the method of determining prayer times and Qiblah direction in space, primarily on the International Space Station. The ISS is more than 200 miles from the Earth's surface and orbits the earth every ninety-two minutes, or roughly sixteen times a day. Do we have to worship eighty times a day (sixteen orbits a day multiplied by five prayer times)? This seems unlikely, since it is compulsory for a Muslim to pray five times a day according to an Earth day, as determined by Allah during the creation of Heaven and Earth – no matter where in space the Muslim is located. As for the Qiblah, for Muslims there is only one, the Kaaba, located in Mecca. A Qiblah that changes in reference to a specific system is not in order! It must be remembered that Allah's creation is ordered.

A user-friendly, portable Muslims in Space calculator could determine the direction of the Qiblah and prayer times on the ISS. Its essential feature would be the use of the Projected Earth and Qiblah Pole concepts. These are based on the interpretation of the holy house of angels in the sky above Mecca. The place is always rich with angels worshipping. As many as 70,000 angels circumambulate it every day. Thus, one virtual Qiblah Pole can be taken as a universal reference to determine the direction of the Qiblah. When the Earth is projected to the height of the ISS, every point on its surface will be projected also, including the Qiblah point, which can be projected upward and downward along the Qiblah Pole. This allows the direction of the Qiblah to be determined in space and in the bowels of the Earth.

Of course, this could be used as evidence of how religions waste their time arguing over how many angels can dance on the head of a pin, or protest about stem-cell research when people are dying of potentially curable diseases. But it is also a perfect example of the immense fertility of our imaginations, one of the real and all too often overlooked driving forces of our history.

And if Dr Abidin's 'Muslims in Space calculator' sounds strange, consider the fact that the Vatican maintains an observatory in the hills above Tucson, Arizona, where it monitors outer space for signs of sentient alien life, in the hopes of converting it to Catholicism. The Mount Graham observatory was originally set up in 1930 to quash accusations that the Church was anti-scientific: environmentalists, and the San Carlos Apaches whose ancestral home it was built on, have attacked the construction as a violation of a unique eco-system, one that supports varieties of wildlife found nowhere else on the planet. But Jesuit Father George Coyne, the former Vatican Observatory director and an extremely well-informed scientist, has said that if intelligent alien life were found, the church 'would be obliged to address the question of whether extraterrestrials might be brought within the fold and baptized'. It was in fact a double whammy of religious doctrine: sacrificing a fragile eco-system in this life for the sake of saving the imagined souls of aliens that may or may not exist, and who almost certainly wouldn't need soul-saving.

By 2005, after two years of seeing people being slaughtered en masse for strange, invisible spirits, I was becoming obsessed by these inspirational phantoms. I had studied international relations as a post-graduate in London, and I had never come across any mention of the role played by our own delusional fantasies in all the wars, revolutions and follies of mankind. Of course, studies have revealed the often malignant role of religion in the course of history, or the madness of devout kings and generals, but there seemed to be very little in the way of how our everyday illusions shape our destinies. As a reporter, I felt compelled to hunt down this elusive culprit.

By that time, I was travelling a lot: Lulu had moved to Mexico City, and I flew over every few months to see her. On one trans-Atlantic flight I came across a report of how our perceptions of the animate and inanimate can often blur in our minds, propelled by our overactive impulse to read purpose into otherwise random events.

Paul Bloom, a Yale psychology professor, believes that evolution has made us into natural creationists. He wrote in *The Atlantic Monthly* of an experiment in 1944 in which two social psychologists, Fritz Heider and Mary-Ann Simmel, made a film in which circles, squares and triangles ‘moved in certain systematic ways, designed to tell a tale. When shown this movie, people instinctively describe the figures as if they were specific types of people (bullies, victims, heroes) with goals and desires, and repeat pretty much the same story that the psychologists intended to tell. Further research has found that bounded figures aren’t even necessary – one can get much the same effect in movies where the “characters” are not single objects but moving groups, such as swarms of tiny squares.’

Bloom also cites numerous examples where people see faces, characters and intent where in reality there are none, but which are superimposed by our hyperactive frontal lobes: clouds look like angry old men, rabbits and elephants. The perfect example of the interaction between supernatural agents and grim reality was September 11, 2001: after god-obsessed terrorists flew two airliners into the Twin Towers, shocked onlookers claimed they could see the face of Satan himself in the columns of smoke billowing over Manhattan. In between these two illusions,

thousands of people were burned to death, suffocated or flung themselves in desperation from the top of the World Trade Center.

On a far lighter note, a bun that bore an unflattering resemblance to the wizened Mother Teresa almost became a holy relic, known as the Nun Bun, while a ten-year-old grilled cheese sandwich that appeared to have the Virgin Mary's face on it (though how anybody knows what she actually looked like is another mystery) sold for no less than 28,000 dollars.

Occasionally, while I was reading about the evolution of human beliefs, the bizarre reality would spill out of the pages of my books into real life. Riding in a crowded bus headed out of Damascus, where I had been writing about how the Iraqi refugee population in Syria had surged well past a million people, I was reading Dunbar's *The Human Story*, and its tale of triumph by 'spiritual' Cro-Magnons over godless Neanderthals. A friendly young Syrian Kurdish student, keen to improve his English, asked if he might leaf through it as we trundled north to Aleppo. The text proved too demanding for his limited grasp of English, and he asked me what it was about.

'It basically says that around five million years ago, humans and chimpanzees were the same,' I said, condensing the text to its most basic thesis. He giggled, as though I'd said something childishly silly in polite, adult company.

'I don't believe it,' he sniggered.

'It's a scientific theory,' I said, trying to be diplomatic. 'Have you heard of Charles Darwin?'

He sucked his lower lip in contemplation for a few seconds. 'In Arabic, is that Howa?'

'Howa?' I asked, not recognizing the name.

'Yes, Howa, the wife of Adam,' he answered. 'You say ... Eva?'

It was my turn to smile. 'No,' I told him, 'Charles Darwin was not the wife of Adam.'

He explained then, very earnestly and carefully in case I was unaware of the true version of events, how naughty Howa was seduced by the devil into eating fruit from the tree of knowledge in heaven and how she and Adam subsequently fell to earth.

‘Right,’ I nodded politely. ‘I think I have heard that story.’ I took the book back and tucked it into the pocket on the seatback in front of me.

We appear to be born, then, with an inbuilt propensity to believe in the supernatural: everything must have been created with a purpose, by some agency beyond our ken. Children exhibit this even more forcefully than adults, studies have shown – it is not something that is drilled into us by our elders, rather something we intrinsically feel, which makes it so much more difficult to pin down. Asked why rocks are pointy, children will say it is so that animals can scratch themselves when they are feeling itchy. Why does it rain? Because we need water to drink.

Throw in our propensity for wishful thinking – after all, few people actually want to die, not even suicide bombers – and you have a heady, volatile mix. Add a few billion dollars of oil wealth and you have something terrifyingly unstable, a high-octane, awe-inspiring gelignite brewed from god and greed.

I remember as a teenager asking my father whether he believed in god. He thought a while (much later, he admitted he was a complete atheist) and said, ‘I’d like to think heaven exists, yes.’ At the time, I poured self-righteous teenage scorn on his superficiality and reluctance to come to grips with life’s most important issues. It was only years afterwards that I realized it was actually one of the most obvious things you can say about religion. We’d all like to think heaven exists and we’ll go there: so much so, that even secular psychology has borrowed one of religion’s most alluring aspects. A friend of mine who was traumatized by the horrors witnessed in Iraq sought therapy to deal with the post-traumatic stress: the shrink suggested this person try to deal with stress by imagining a ‘safe place’. That place can be a beach, an island, a high-walled, sumptuous castle where everything is provided for you, somewhere beautiful and

relaxing, where nothing bad can get to you. Is that not simply a version of heaven for atheists, here and now?

Flying regularly into Mexico, I came across the perfect example of an entirely pointless holy war, an example of people dying in droves for gods now entirely forgotten and consigned, along with so many other once-powerful pantheons, to the museums. These conflicts were known to the Aztecs as ‘Flower Wars’.

These sacred, fake battles were fought by the burgeoning Aztec empire after it had conquered its neighbours in the area of what is now Mexico City and reduced them to mere vassal states. Aztec culture was rigidly hierarchical and aggressive, rather like the Assyrians who created one of the world’s first empires from their base in northern Iraq. Like the ancient Assyrians, combat was seen as an act of worship to appease bloodthirsty gods, in this case Huitzilopochtli, the deity of war. Wandering around the expansive halls of Mexico City’s fabulous Museum of Anthropology one day, I came across the imposing stone statue of this terrifying god, a ten-feet-tall, square-set monster with human skulls dangling from his belt. He was, apparently, a hungry god.

The Flower Wars, known in the Aztecs’ native tongue as *xochiyaoyotl*, were not fought to kill enemies or win territory. In fact, they were planned combats with already subservient – and often reluctant – neighbours. The aim was for valiant warriors to take as many prisoners as possible. The captives were taken back to islands of Tenochtitlan, an area now drained of water that covers roughly the centre of Mexico City. There, they were well fed and treated with respect. They had to be, since they were now considered as messengers to the gods. Unfortunately for them, the message they were delivering was blood sacrifice. Thousands would be lined up and marched to the top of towering pyramids where their hearts were hacked from their living bodies with razor-sharp obsidian blades. The black, volcanic glass knives were not durable enough to cut through rib cages, so priests opened up the sacrifice’s stomach and reached inside to cut out their hearts. There were eighteen festivities every year that demanded human sacrifice.

Conquistadors – several of whom were snatched in mid-combat during the prolonged fighting for Tenochtitlan, and immediately dragged off to be sacrificed even as their comrades were still battling on the causeways below – said that strips of human meat were offered as gifts to the gods, but also to important dignitaries (who wisely preferred to snack on turkey). Juan Diaz, one of the original conquistadors who wrote an account of his exploits under Cortés, also described the efforts the Aztecs had made to create a real vision of hell inside the city – beneath the pyramids were enclosures filled with snakes, scorpions, wild dogs and buzzards, in honour of the underworld deities. The carcasses of the sacrificed were dumped in these pestilential halls to be devoured by these creatures that represented the spirits of the underworld.

Why did they do this? Their priests said that human sacrifice was needed to restore the blood that the sun lost in his daily battle against the darkness at sunset, and that every fifty-two years there was the possibility the world would end. Unlike the millenarian societies of Judaism, Christianity and Islam, there was no promise of redemption or divine judgment at the end of days, just the prospect of destruction that had to be plugged with human gore.

In fact, it was just the sun going down every day.

Little wonder, then, that when Hernan Cortés and his conquistadors arrived in Mexico in 1521, they found plenty of local allies willing to fight against the Aztec overlords. Cortés also famously enjoyed the advantage of having his arrival mistaken by the Aztecs for the long-prophesied return of Quetzalcoatl, the Plumed Serpent, a messiah figure in Meso-American legend. Many of the locals apparently thought his cavalymen were four-legged Centaurs, having never seen horses before.

By contrast, in April of 2000, almost five hundred years later, a group of Japanese tourists were less fortunate. When they stepped off a bus in the main square of Todos Santos, in Guatemala, the villagers, alert to ever-present rumours of child abductions in the region, mistook the Japanese visitors for Satanists seeking to steal their babies for ritual sacrifice and attacked them, beating to death one man and the unfortunate tour guide. So it goes with our shaky belief

systems: rapacious conquerors are mistaken for benign gods, friendly tourists are mistaken for devil worshippers. You never can tell what strange paradigm you might be stepping into.

There is an opinion among some unbelievers that if God doesn't exist 'out there', he must exist in our heads somewhere. If we made him up, then he resides somewhere in the scarcely mapped, tangled undergrowth of our brains. In my paper chase looking for that place where the moody, dangerous deity resides – somewhere in the gnarly amygdala at the centre of the brain, rather than on a fluffy white cloud in the sky – I came across an extraordinary theory that goes way beyond that concept, itself already too revolutionary for the vast majority of mankind.

According to Bundle Theory, we do not even exist ourselves, never mind the gods we may have invented along the way to keep us company, like the 'invisible friends' that children talk to. We are, in fact, a figment of our own imagination, created by our ever-inventive brains. We made ourselves up as a handy trick to allow us to cope with the immensely complex interactions involved in everyday human society. This disturbing notion stems from neuroscience's failure to locate anything in our heads that might be pinpointed as a centre of consciousness. Behind our eyes, those windows to the soul, there is only meat. There are 'bundles' of instinct, ingrained behaviour, learned responses to hugely complex social and cultural procedures that allow us to exist in massive groups of highly advanced and complicated animals. When all this is put together we form what we commonly refer to as an ego. If human society was a strange new environment that slowly emerged out of our advancing brain power, we needed a guide to steer us through it, the way on-line gamers in their invented computer worlds need an 'avatar', or character, to enter the virtual environment and interact with other gamers. As Paul Broks, the neuropsychologist and author of *Into the Silent Land* put it, if the human body and brain might be compared to a computer, then the culture that being exists in might well be described as the software that shapes and informs it. The person, he concludes, is merely the writing on the screen of the computer.

An extraordinary exhibition came to Mexico City while I was there reading *Into the Silent Land*, during one of my breaks from Baghdad. It was Gunther von Hagens' Body Worlds, and featured real human bodies, of people who had died and donated their corpses to science. The bodies were stripped down to their component parts. There were entire flayed corpses showing the interlocking layers of skin, muscle and bone, some of them set up in bizarrely normal poses, such as sitting on a chair at a table and reading a book. Preserved brains protruded from the opened skulls of chess players. The exhibition aimed to show off what an extraordinary thing the human body is, in all its meaty complexity. But having just read a scientific study arguing that we do not exist – that we are not even the ghosts in the machine, but merely writing on the screen of a computer – I found it overwhelming. As I stumbled out of the hall and into the bright midday light of Mexico City, the whole world seemed to shimmer before my eyes. The people I passed no longer looked real, just meaty engines trailing the steam of consciousness, ready to evaporate if scrutinized too closely. I felt my own self dissolve for several moments, before the simple demands of navigating Mexico City's dangerous traffic and bustling sidewalks gradually squeezed my sense of self back into place, like a dislocated joint being eased back into its socket. I was later told by a friend who had dabbled in eastern philosophy that in Buddhism such experiences are known as 'satori': moments of enlightenment where the devotee can glimpse the true nature of creation. But it didn't feel enlightenment to me. It felt like madness.

Broks points out that Bundle Theory is in fact nothing new. For more than 2,600 years, Buddhists have been teaching that there is no such thing as the 'self'. 'The bundle of elements is void of self. In it there is no sentient being. Just as a set of wooden parts receives the name of carriage, so do we give to elements the name of fancied beings,' says one Buddhist text.

John Gray, in his book *Straw Dogs*, states that modern discoveries in cognitive science are intriguingly similar to many of the teachings of Taoism, that life is simply a dream we can never awake from. Consciousness is a delusion, designed to allow us to believe we make conscious choices. From this sense of choice, we can construct moralities that govern our behaviour and allow societies to function. But as Gray points out, our brains are processing around fourteen billion bits of information per second. The bandwidth of our conscious selves is

around eighteen bits per second. Clearly our conscious selves are a minuscule sliver of what we really are.

Bundles of instincts strung together by the thread of memory and experience, we call ourselves 'people'. Lonely and afraid, these people invented gods to look over them.

The survivors appeared only lightly injured – arms in slings, plasters on faces, limping legs supported by crutches. But what struck me as odd was that these marines who had almost been killed a couple of days before, when a car bomber rammed their truck in Fallujah, were killing time playing a simulation war game. Most of them were little more than kids, so it was hardly surprising that here, in a no-frills field hospital with little else to do, they whiled away their time with a computer game. It was a common pastime for soldiers, and I sometimes wondered if they could always tell the difference, in their monotonous, occasionally terrifying lives, between the real world and the games they played so obsessively.

The game they were playing that day was called Ghost Recon. The artificial landscape they were shooting their way through looked just like the lands outside the perimeter, where eight of their comrades had been blown to pieces next to them a few days earlier. Flat, featureless and dusty, it might have been modelled directly on Anbar: lots of games were designed to resemble current conflicts, as though that was the only way kids back home, the same age as these young soldiers, could relate to this endless war. For the wounded marines, it was as if they were getting a second chance. With each failure in the game, a new life automatically afforded another chance to go back and shoot the lurking bad guys. I had no idea whether it was therapeutic or damaging to their traumatized psyches. At least they didn't seem bored or upset, just lost in the screen in front of them.

It struck me as I watched them shooting up insurgent avatars on virtual desert roads that this was in fact where so many American soldiers and Iraqi insurgents met: both have imaginary second lives. Die in a video game and you are immediately resurrected to fight another day: die

in a jihad and you automatically move up to the next level, paradise with its crystal rivers and seventy-two virgins.

You never wake from the dream.

Here's a tale to toss into that age-old struggle for possession of our unsleeping imaginations.

Millions of year ago, a group of tooled-up, super-smart apes dreamed they were human beings. Armed with that knowledge of self, they invented pantheons of moody gods and sinister devils who they sought to appease with vast temples and vows of submission. After millennia of wars driven by avarice and phantoms, of restless explorations and scientific discoveries, their planet, that shining little dot of life in a vast, cold universe, starts to fall apart because they have been so distracted by their search for what it means to be human that they fail to recognize their true nature. They begin to realize their entire history has been based on a false assumption and they are, after all this, just a bunch of great apes whose brains, having conquered nature, become easily bored and seek something more than what they already have.

What ancient scripture, full of miracles and divine interventions, could be more fantastical than that? What Samson and Delilah, what Job or Noah, could ever compete in our febrile imaginations with a plot so strange and tragicomic?