

A SPECIES FOUNDED ON FAITH

Our Suicidal Asset



H-bomb test 'Castle Bravo' at Bikini Atoll on Feb. 28, 1954.

The extraordinary power inherent in human mysticism was exemplified at dawn on a remote atoll in the western Pacific on February 28, 1954, when the USA exploded a hydrogen-fusion bomb, codename 'Castle Bravo' (LEFT). This thermo-nuclear device released the energy equivalent of 15 megatons of TNT and far exceeded the 5 megaton explosion they had planned. The bomb was tested because America felt impelled to display its superior firepower to its Cold War adversary, the USSR. Here was mysticism beyond the edge of sanity.

The Russians trumped the 'Bravo' explosion 7 years later, however, when they detonated 'Tsar Bomba', a hydrogen-fusion bomb with a yield of 50–58 megatons. This single weapon unleashed 10 times the combined power of all the conventional explosives used in World War II, and it remains the largest single energy release ever achieved by our species. It was a tribal display that risked our species' survival.

FAITH'S FAUSTIAN PENALTY

That long series of nuclear tests by Russia and America also announced that our most productive specialisation, mysticism, was about to launch its Faustian endgame on our overcrowded planet. This will ensure that we will be too busy fighting amongst ourselves to build a cohesive defence against the lethal combination of social and environmental threats that are currently converging on us.

"An evolutionary adaptation that increases a species' ability to harvest energy from its environment becomes a lethal handicap when the birth environment of that specialisation disappears."

THE PEACOCK EFFECT

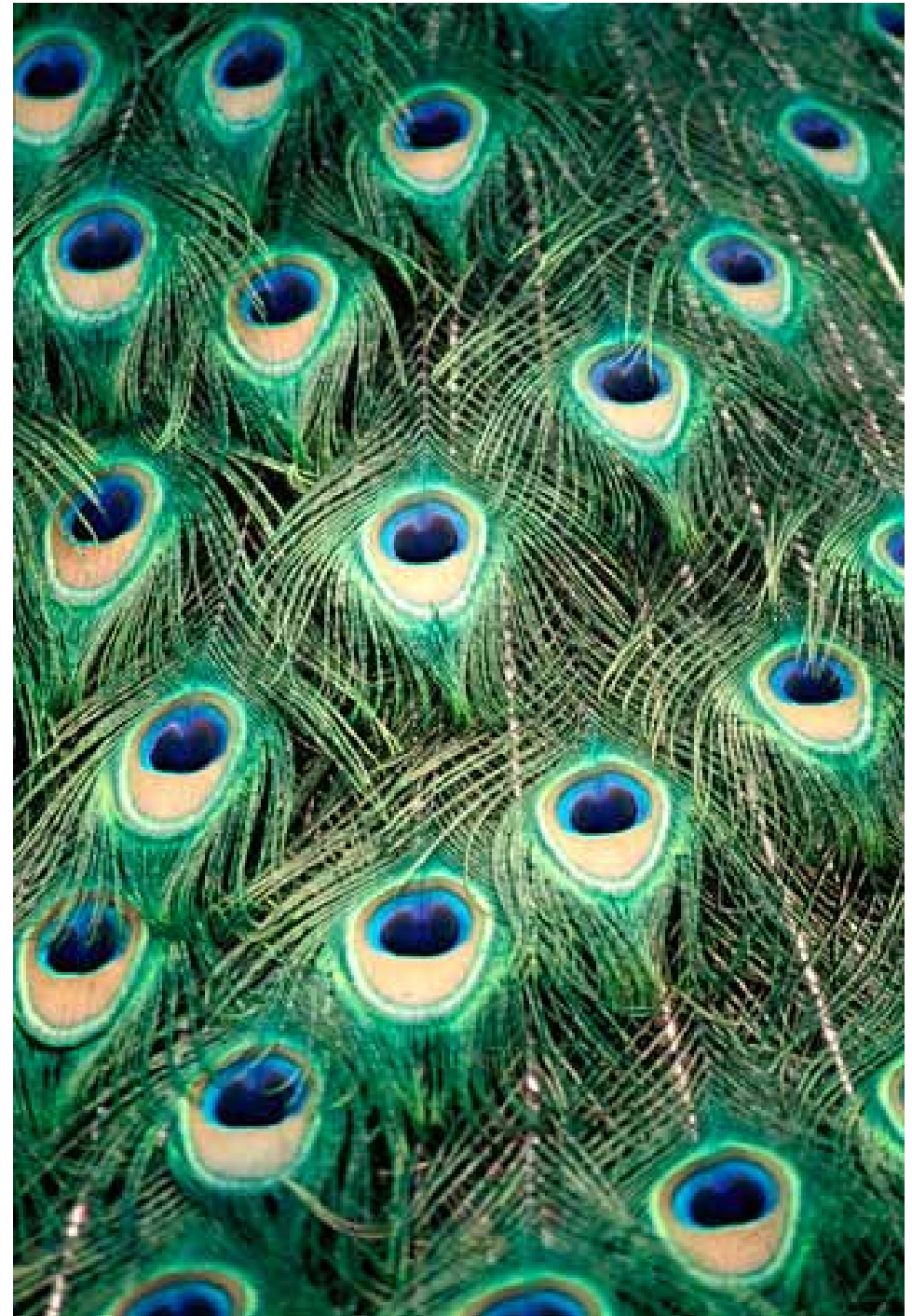
Evolution's great strength lies in the fact that even the most efficient and fecund species are available for culling. This universal vulnerability hinges on what might be called the Peacock Effect. In peacock society the male's spectacular tail is a major reproductive asset, but only in the species' birthplace—a forest. Should the forest disappear, the peacock's cumbersome tail instantly doubles as a gaudy advertisement for fast food in the eyes of any passing predator.

All species possesses adaptive specialisations of one kind or another. But whenever the specialisation's birth environment disappears, that specialisation becomes a lethal handicap. The more extreme the specialisation, the more lethal the handicap.

Each species has its own personal peacock tail, even that paragon of animals, *Homo sapiens*. And in this evolutionary sense, our peacock tail is just as spectacular as the bird's. The only difference is that ours is entirely intangible, very well concealed, and not available to adjustment or excision, residing as it does in the three billion base pairs of our DNA. This peacock tail is our genetically-determined mystical nature. It is most lavishly expressed in our peculiar capacity to believe implicitly in the patently unbelievable, and to attribute unnatural power and mystical significance to anything that either contributes to, or threatens, our genome's survival.

In its original tribal environment such mysticism bonded all members of the tribe into a cohesive fighting unit that behaved like a cornered animal—easily enraged, formidable when roused and dangerously unpredictable. Armed with such beliefs and a few crude weapons, tribal warriors now found themselves able to fend off even the largest of the four-legged predators—predators that had previously hunted them almost to extinction. Thanks to language-based mysticism, our species had finally fashioned the *Excalibur* that would make up for the gross physical inadequacy that had once posed a dire threat to its survival.

This genetic addiction to mystical explanations for natural phenomena is still a characteristic of our species, even though the environment that gave birth to it has finally disappeared. . . .



'MORALITY', THE *EXCALIBUR* OF OUR GENES'

Imagine you are scavenging for protein in an African woodland two million ice-age years ago: you are semi-naked and bare-foot, and you are being stalked by a sabre-toothed cat the size of a leopard. As a relatively slow, weak and defenceless animal that lacks fur, claws, and fighting teeth, your prospects for survival are next to zero. Indeed, there is only one thing that can possibly save you now: it is the prompt arrival of some of your tribal comrades, screaming war cries and throwing rocks and spears at the sabre-tooth. Any self-respecting predator would then withdraw and begin to search for more predictable prey.

But a question remains: why on earth would your tribal companions place themselves in mortal danger by coming to your aid in those hazardous circumstances?

The answer lies deep in their DNA. They would be obeying genetic imperatives that had been selected, shaped and refined by millions of previous predator confrontations. Tribal survival is crucial.

Because of this evolutionary history, the imperative to heroically defend other members of your tribe is now well embedded in your DNA via your genetic **alleles**.^[1]

These **alleles** make each member of the tribe act as though their personal survival utterly depended upon the survival of the tribe as a whole. Our **alleles** thereby generate sufficient unifying emotion to ensure that the whole tribe behaves like a single organism, with all of its genetic **alleles** working in concert to keep their hosts safe from harm, well fed, and highly territorial.

It was this genetically directed tribalism that rescued our species from extinction on the pitiless plains of ice-age Africa more than a million years ago. Unaware of the concealed board of **allelic** directors sitting in all of its cells, the human brain presented the genetic imperative to 'preserve the tribe' as a "moral" behaviour sanctioned by the gods.

Here then, is the birthplace of all human "Morality". Exquisitely concealed within the folds of language, legends, customs, and rituals, this genetic imperative would not only rescue our physically inadequate primate line

from the brink of extinction, it would launch it eventually to a position of biological pre-eminence within the planet's turbulent biota.

Even though many of us now forage and hunt in glass-walled office towers, we remain tribal hunter-gatherers by genetic definition. Consequently, our ice-age "Morality" has never disappeared.

It was the Morality of 300 Spartans that instructed them to surrender their lives in a desperate attempt to delay the advance of 100,000 Persian invaders in Greece's narrow coastal corridor at Thermopylae 2,600 years ago.

In similar fashion a small band of British fighter pilots willingly gave their lives to blunt a prolonged pre-invasion assault by the entire German Luftwaffe over southern England in the grim autumn of 1940. Dubbed the Battle of Britain, it was, indeed, Britain's "finest hour".

Likewise, four years later, almost 10,000 young Japanese airmen volunteered for 'honourable death' in a last-ditch attempt to save their homeland from invasion by the combined forces of the Western Allies. Piloting stripped-down aircraft loaded with high explosives, the chosen few launched wave after wave of Kamikaze attacks on the battleships of the Pacific Fleet during the dying months of World War II. For the outlay of 378 'suicide planes' and about 600 aircrew, this tidal wave of allelic heroism sank 16 Allied warships, damaged 87 others, and achieved the death of more than 2,000 American soldiers, sailors and airmen.

Humanity's **alleles** will of course continue to wield their 'mystical' *Excalibur* with undiminished passion, but in the altered environment of our overpopulated planet, such regression to tribal 'morality' will only hasten the fragmentation of society and derail our attempts to mount a coherent defence against the multiple threats that now surround us.

Any evolutionary adaptation that increases a species' ability to harvest energy from its environment will automatically become a lethal handicap when the birth environment of that specialisation disappears."

^[1] **ALLELE:** a corresponding gene, not necessarily identical, that reoccurs throughout the gene pool.

The Battle-Cry of the Genes

Emotion is the key. It invariably signals that our genes have been stung into action, either by some threat, or by an opportunity to reproduce. From that moment on, any interference by our rational cortex will either be switched off entirely, or it will be remolded to accord with genetic behaviour that successfully preserved human genomes in our hunter-gather past.

Looked at in this light, all culture is blatantly genetic. It is preserved by emotions that disengage rational thought whenever our genes perceive the slightest threat to themselves or to their alleles.**[1]**

Problem arise, however, when there is a major discord between behaviour that will help an individual's genes to survive, and behaviour that will harm the individual but contribute to the tribe's survival. Such discords lie at the very core of the 'hero's dilemma', and in varying degrees, they represent the genetic foundation of all human 'morality'.

This allelic imperative is typically designed to lock our behaviour into patterns that will preserve our genetic alleles in other members of the 'tribe'. In other words, 'Morality' evolved to protect the gene pool.

Since genes tend to replicate, cooperate, and survive in groups, and since alleles therefore tend to cooperate and replicate in similar groups, this explains the powerful allegiances that form between 'like-minded people', whether directly related or not.

It also explains the loyalty bonds that often exist within social, commercial and political sub-groups, steering them towards aggressive responses that might, in hindsight, seem disproportionate. And it explains our indecent haste to respond with lethal force whenever family, tribe, territory, or religion, comes under the slightest threat.

"So let us recognise human mysticism for what it really is: an old and vital streak of genetic madness that once rescued our kind from the brink of extinction, took us to the stars, and will run us through with due despatch when our little play is done." ('The Spirit in the Gene', 1999.)



ABOVE: The first Aboriginal Tent Embassy, Canberra, 1972.

BELOW: Up to three million Islamic pilgrims converge on Mecca every year.



[1] ALLELE: a corresponding gene, not necessarily identical, that reccurs throughout the gene pool.

Our Vital Derangement

Two million years of hunter-gatherer hardship and assiduous language development have honed human mysticism into an evolutionary weapon of unrivalled power.

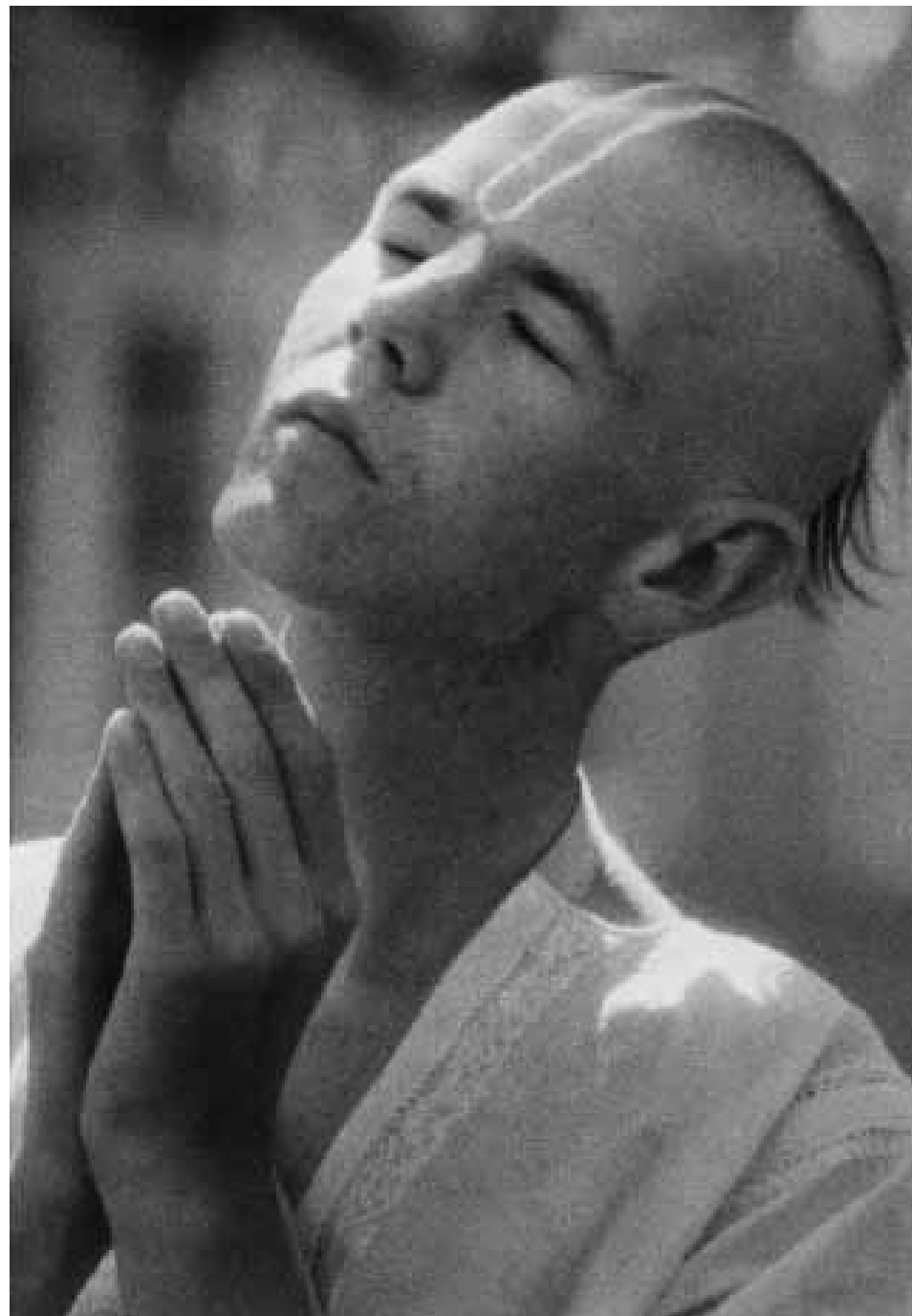
Whether our mysticism relies on a belief in supernatural agencies such as gods and devils, astrology and intergalactic aliens, or whether we believe in crystals, cards, or tea leaves, or in political-party dogma based on “market forces” and endless economic growth, the cultural provenance of our comforting delusions is of little concern to our genes. The only thing that matters to them is the quality and strength of the tribal cohesion that those beliefs generate. Tribal unity has been the key to our species’ genetic survival for more than 2 million years.

The brain structures that enable us to tune out rational thought and resort to ancient patterns of genetic behaviour have been largely identified. They lie, as might be expected, in the older structures at the core of the brain. Central to these are the hypothalamus, the pituitary gland and, most crucially, the small, almond-shaped amygdala.

The amygdala is primarily involved in appraising the genetic significance of situations in which an immediate threat might be involved. In short, it governs our ‘fight-or-flight’ reflexes and determines the particular thresholds of aggression and discretion that characterise each one of us. Here is the neuronal asset that saved our species from early extinction.

The hypothalamus meanwhile, acts as the control centre for a wide diversity of other behaviour, including the physical expression of those mental states. It achieves this in conjunction with the amygdala and the pituitary gland that sit just below and in front of it. Electrical stimulation of one part of the hypothalamus can unleash rage and a fullblown attack response, both in humans and other mammals, while stimulation of a neighbouring part of the hypothalamus can elicit feelings of intense pleasure—the kind that leads occasionally to religious fervour and compulsively ‘moralistic’ behaviour.

This varied response from a single brain structure helps to explain why human responses to moralistic words can often generate the most extreme forms of ‘revenge’ behaviour, ranging from slavery to genocide.



Animal Mysticism

At Chicago’s Brookfield Zoo on 16 August, 1996, a small boy climbed a barrier-planter and its railings, and tumbled more than 6 metres (about 20 feet) down a ravine into the gorilla habitat. Crowd and staff watched in horror as seven lowland gorillas stopped what they were doing and an 8-year-old female, carrying her 17-month-old baby on her back, approached the body of the unconscious boy. She picked him up, cradled him in her arms, carried him to an access door, and quietly waited for the keepers to come and take over the protective parenting role that she had so readily assumed.

The gorilla, Binti Jua, had been hand-reared by zoo staff, but the relevance of this is minimised by the fact that there have been at least two other instances where similar events prompted similar behaviour by gorillas. One occurred at Jersey Zoo in the Channel Islands, and one at Tama Zoo just outside Tokyo.

These examples of inter-species compassion serve to illustrate that gorilla genes recognise themselves in us even more readily than ours recognise themselves in gorillas. Compassion is animal behaviour.

Conversely, There is a widely held belief that ‘man’s inhumanity to man’ is a peculiarity of our species and that our tendency to genocidal behaviour is unique in the animal world. This too, is untrue. The evidence was uncovered by primatologist Jane Goodall and her co-workers at Gombe Stream Research Centre in Tanzania, Central Africa. Painstaking surveillance of two groups of chimpanzees between 1974 and 1977 revealed a clear case of systematic genocide carried out by one of the groups.

In a series of raids spread over the four-year period, well disciplined war parties from the main Kasakela group finally succeeded in wiping out all members of a splinter group of seven males, and three adult females, along with all of their young. It seems that they had mentally reduced the traitor group to the status of ‘lower animals’, just as humans do.

Clearly, the ‘traitor’ tag generates a peculiar degree of malice in both species, perhaps due to the fact that traitors inevitably share the tribe’s genes, making them most likely to compete, not only for the tribe’s territory and food resources, but also for access to the tribe’s females.



MYSTICISM: A FAMILY CHARACTERISTIC

Since we share more than 98% of our genes with chimpanzees it is hardly surprising that our behavioural imperatives are virtually identical. Our brains are far larger however, but this only allows us more options to achieve our chimpanzee imperatives. The only major biological difference is our highly developed language facility (Broca’s area), and this is aided significantly by our modified vocalisation equipment. But the genetic engines that drive this equipment are essentially the same in all members of the Hominidae family.

'Morality': A Very Moveable Feast

Genocide is exceptional in the primate world, and most species tend to adhere to complex codes of 'moral' conduct designed to ritualise major conflicts and limit the physical damage that would otherwise occur. Consequently, most confrontations are settled by threat displays followed by submission or flight by one side or the other.

There have also been many well documented instances of conflict settlement by a third party, usually a high-ranking male or female. This useful behaviour is especially common among chimps, bonobos, baboons and stump-tailed macaques, but it has also been recorded in mountain gorillas, golden monkeys, capuchin monkeys, patas monkeys, vervet monkeys, and even in red-fronted lemurs.

In other words, many primate species appear to be every bit as 'moral' and 'immoral' as humans, although this behaviour is most commonly epitomised in chimpanzee and gorilla society.

Thanks to the well developed sense of revenge that is attached to all primate 'morality', they, like us, are also prone to murderous confrontation. The 30% casualty rate that is common among most species of higher primate is roughly the same as the casualty rate for the vendetta ridden hunter-gatherers of South America and New Guinea.

Along with well-documented cases of systematic genocide carried out over several years by chimpanzee hunting parties, there are also many examples of cooperative hunting by chimps in their attempts to catch and eat their main prey, the Red Colobus monkey (*Procolobus badius*).

Nevertheless, modern human violence is indeed unique in one crucial respect. Although physical aggression occurs less frequently than it does in chimp society, thanks to our sophisticated technology and to our talent for 'inspirational' language, we usually achieve kill rates that are vastly higher than those achieved by chimpanzees or other primates.

The world now watches the growth of lethal internecine conflicts with increasing horror, yet rarely steps in to stop them. That the UN so often fails as a peacemaker should surprise no one. We are true primates.



ABOVE: Mass grave No.2 at Bergen-Belsen concentration camp in May, 1945. The 5,000 bodies that were ultimately buried in these pits by British troops were the human debris left over from systemised torture, starvation and neglect by Nazi camp staff during the final months of World War II. (Photo: 'Life'.)

The Ultimate Price Of Language

The enlargement of the hominid brain that occurred in stages between 2.5 million years ago and 200,000 years ago successfully midwived the development of a sophisticated language facility within the left hemisphere of that brain. It is essentially based in a left forebrain region known as Broca's Area.

A key features of language is its ability to push our genetic buttons with astonishing speed. This was a crucial advantage when we lived a fully tribal life in small groups, surrounded by threats of all kinds. But with millions of people crammed together in stressful, overcrowded cities, any arrogant, ignorant leader who can push the genetic buttons of the 'mob' with little regard for the consequences, will invariably gain disproportionate political power and a feeling of self-rightiousness that panders to their psychopathic tendencies.

Armed with this complex communication facility plus a unique ability to juggle abstract concepts and to imagine fantastic, non-existent events, human genes became able to reinforce their genetic directives by attaching powerful mystical scenarios to various aspects of their environment, and to communicate these to their companions.

It gave humans a powerful coercive mechanism that could unify and magnify behaviour that appeared to enhance their chances of survival and reproduction. Mystically loaded slogans could unify and inspire tribal groups to treat some of their leaders as semi 'divine' and to label all disbelievers as 'evil'. This mystically enhanced language facility could even coerce social groups to collaborate in acts of pillage, rape, torture and muder, and such malleable mysticism enabled political groups to revert to tribal fundamentalism at the drop of a slogan.

Consequently, the propaganda strategy of all successful leaders is essentially similar: Reinforce the main fears of your audience; identify your opponents with derogatory labels, keep your campaign slogans simple, and repeat those labels and slogans as often as possible.

The highly successful Nazi propagandist, Joseph Goebbels, urged his followers to adhere rigidly to these tactics during his prolonged campaign to purge Germany of its Jews and gypsies in the late 1930s, and his advice is still slavishly followed by many modern politician leaders.



ABOVE: An anti-Vietnam War rally in Perth, Western Australia, in 1970.
BELOW: Australia's former Prime Minister, Tony Abbott, followed Goebbels' advice in his propaganda campaign against former PM, Julia Gillard in 2014.



PHOTO: **Andrew Meares** (Sydney Morning Herald).

Words Push Our Genetic Buttons

The genetic engines that drive human behavior are the same as those that drive all the great apes, but we are just as blind to the genetic nature of those drives as we are to their evolutionary origins. If only we could watch the action in silence, without the deafening cultural soundtrack, our chimpanzee genes would shine through with perfect clarity.

Throughout history, the rise and fall of cultures has always been primarily determined, not by the ebb and flow of reason or technological innovation, but by tides of passion that have been inflamed by gaudy language. Logic merely devises the social mechanisms and technological hardware that underpins those cultural ‘triumphs’ and ‘tragedies’.

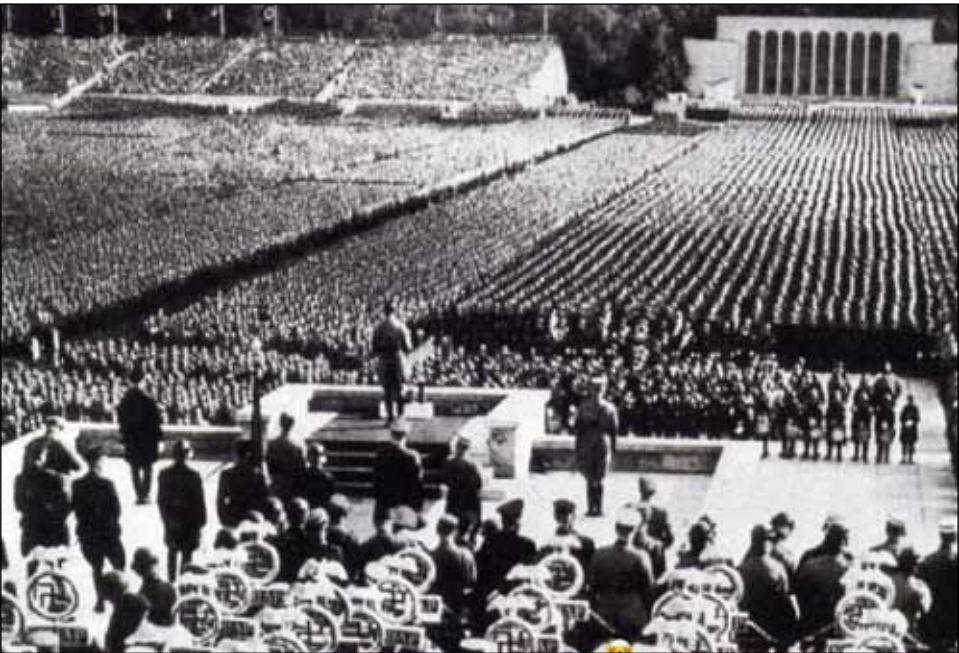
According to the Arthurian legend, *Excalibur’s* elaborately decorated scabbard was the real source of the sword’s magical powers, multiplying them tenfold. In similar fashion, language is the jewelled scabbard that endows human mysticism with its astonishing power.

The mystical significance that we automatically attach to anything that impinges on the survival or the regeneration of our genes (and their alleles) not only confirms the genetic origin of all behaviour, it guarantees that we shall see increasingly aggressive, ‘fundamentalistic’ behaviour in human society as the tide of toxic pollutants, epidemic diseases and climate instability continues to rise.

Aided by a global loss of forests, an accelerating loss of species, increasing pollution of land, sea and air, rising sea-levels, and increasing disruption of global weather regimes, this pattern of social disintegration and mystically based aggression will now contrive our discordant demise.

The size and global scope of this environmental disruption accurately reflects the size and impact of the current human plague. It has been the most catastrophic plague irruption by a single-species that the evolutionary process has produced in a billion years.

So having once been the driving force and executor of the human plague, our innate mysticism will now switch into its penalty mode and will help to end the global human plague—a plague that already threatens to extinguish up to a half of the planet’s biota.



ABOVE: Adolf Hitler addresses a Nazi rally at Nurembourg in 1939.

BELOW: An amateur orator harangues a crowd on the Sydney Domain in 1973.



The Highly Malleable Male Genome

At least two million years of savage Darwinian selection have managed to maximise the tribal imperatives that had been embedded in the genes of our primate ancestors. But this has left human males with a behavioural diversity so great that it engenders internal discords of its own. It has bred an array of cultures that are essentially patriarchal and prone to the kind of male arrogance that best serves such delusions.

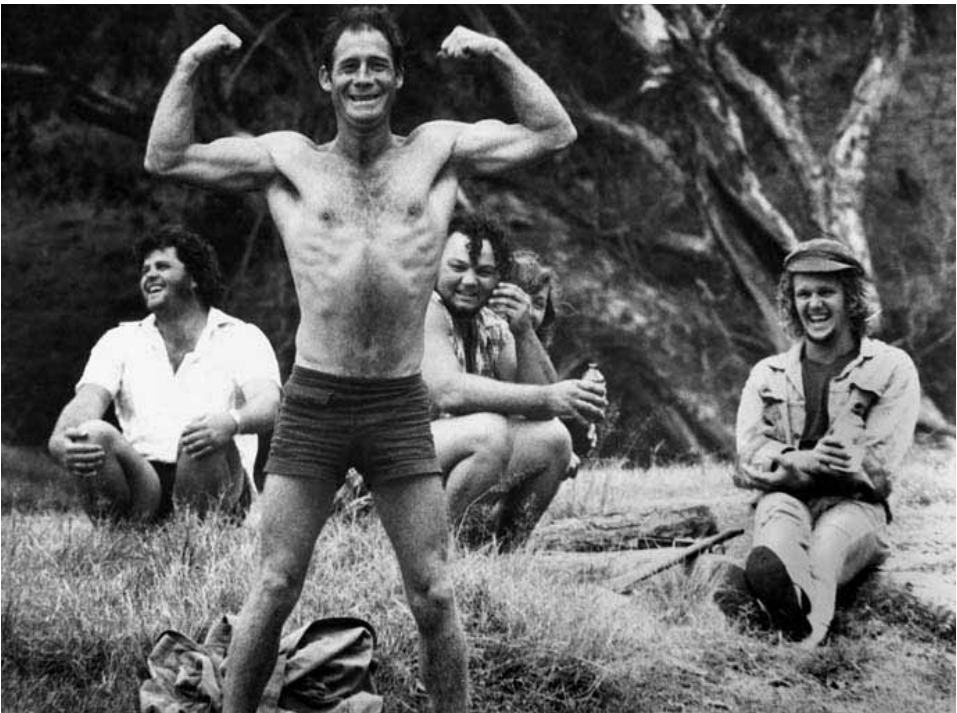
The global distribution of these male-dominated cultures will ensure that the resurgence of tribalism within our species will be more than sufficient to fragment and immobilise us in the path of the social, genetic and environmental crises that are currently converging on our species.

Such sub-cultures tend to be mystically based and bonded by multi-stranded religious belief systems such as Christianity and Islam. These discords will play a major role in crippling our attempts to organise a collaborative response to any of those looming crises.

Those antique religions and their multitude of cult-like permutations have a vast array of savage responses written into their so-called "immutable laws", and these discords will enable their devotees to cherry-pick whatever dogma best suits their political agenda.

Climate change, epidemic disease, toxic pollution, and a growing tide of genetic and epigenetic dysfunction, these are evolution's standard responses to overpopulation by any species. They are usually sufficient to collapse most plague irruptions reasonably quickly, although we are indeed a special case in one peculiar respect: we have armed ourselves with a wide variety of science-based weaponry that is able to accelerate our rates of slaughter far beyond the rates available to most other plague species. This will make our collapse far easier to achieve.

Thanks to our enlarged forebrain and its ability to juggle abstract concepts, and to express these concepts in emotive language, we also have a peculiar ability to generate and maintain degrees of savagery that lie far beyond the range of other animals. These mystically based derangements should be sufficient to disable any attempt to construct a coordinated and rational defence against evolution's most savage assaults in the future.



ABOVE: Workers' picnic, near Sydney, 1973.

BELOW: The Iraqi attack on Iran's oil port at Abadan in 1979 began an 8-year war that has launched instability throughout the Middle East and Africa.



Unknown photographer

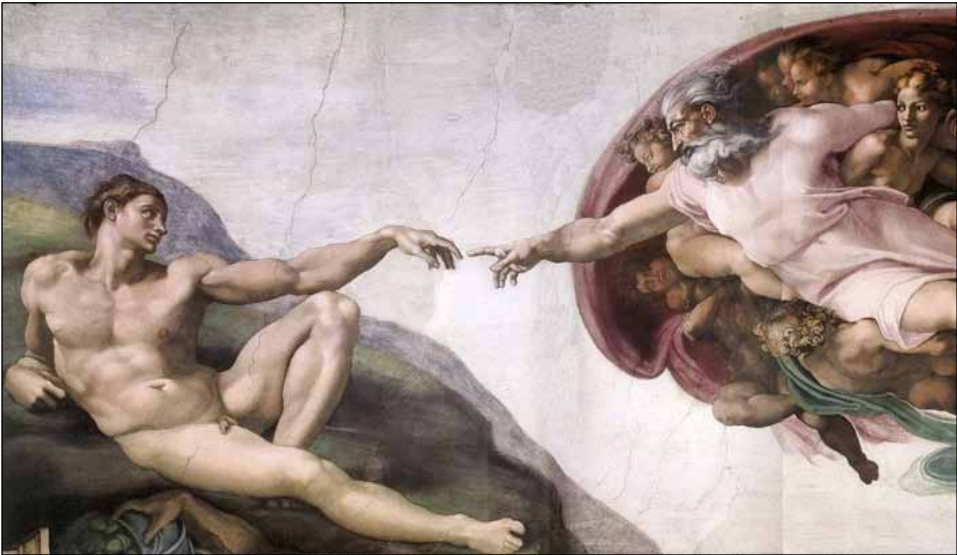
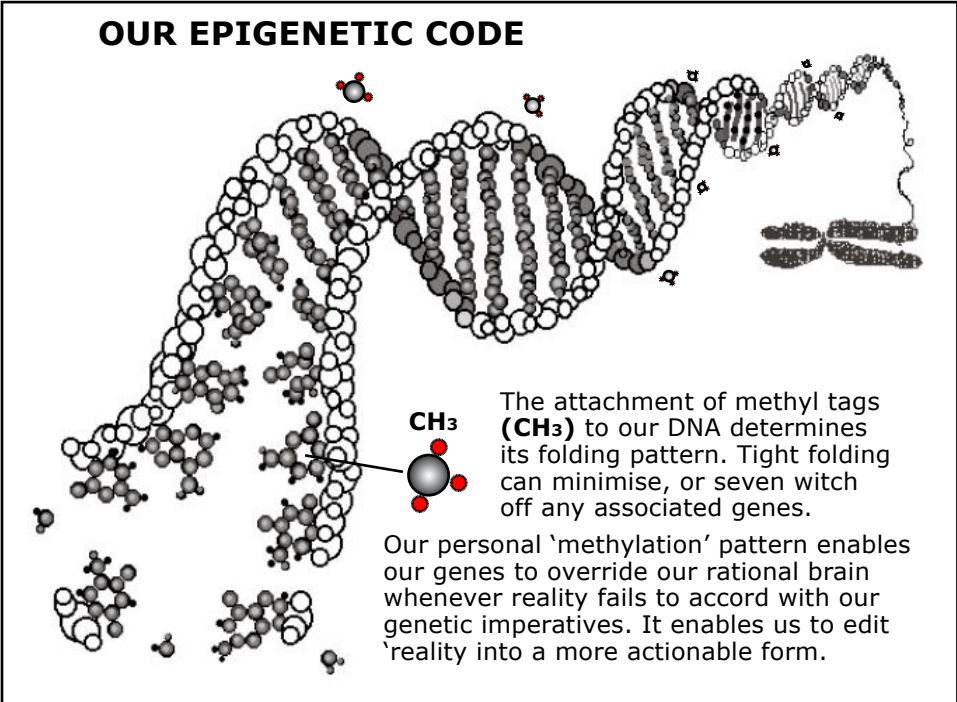
The Birthplace of Mystical Dreams

Whenever our genes need to squeeze our perceptions into a shape that better suits their purpose they rely on a curious neuronal phenomenon known in theatrical circles as 'Suspension of Disbelief'. It refers to the brain's ability to switch out crude reality and instantly replace it with a fictional scenario that sits more comfortably with our genetic imperatives.

The world of entertainment utterly depends on this 'suspension of disbelief' facility to enable the viewer to 'believe' that the fictional characters and scenarios that are portrayed by the author are, in fact, entirely true and real. This is the neuronal device that enables the audience to switch off rational thought in an instant, and instead of watching actors playing roles in fictional situations, see only 'real' people reacting to 'real' situations. The switch itself is enabled by epigenetic methylation.

This ancient neuronal short-circuit switches in the moment a fictional character or event touches one of the multitude of mental buttons that are linked to our basic genetic imperatives to survive and reproduce. Touch one of those buttons and a stew of hormones and neurotransmitters flood the body and brain, generating a rush of emotion that switches out the neuronal cortex, and brings rational assessment to a halt. The imagination then fires up, transforming fantasy into 'reality', and in that instant almost any fantasy becomes believable.

Here is our genes' secret weapon in their age-old struggle to survive and reproduce in a hazardous and unstable environment. Here is the shrewd old genetic midwife that delivers passionate belief in witchcraft, and 'alien abductions'; in gods, miracles, angels and devils; in the validity of religious dogma and astrological predictions; in sustainable development, in 'market forces', and perpetual economic growth. It is this antique device that bestows peculiar mystical significance on 'the home team', 'the political party', 'the Church', and 'the Flag', thereby bonding us into families, tribes, nations, religions and ethnic groups; into teenage and criminal gangs, and into political parties and their childish factions. And it was this same genetic facility for manufacturing dreams that allowed 19 al Qa'eda terrorists to see only heroic martyrdom in their suicidal attacks on New York and Washington on Sept. 11, 2001.



ABOVE: Michelangelo painted his most iconic work 'the Creation of Adam' on the ceiling of the Sistine Chapel, Rome, in 1512. It offers a graphic analogy for the creative input achieved by our own personal genome via the subtle touch of its inherited methylation .

The Birthplace of Nightmares

As the global population grows and the environment deteriorates, so social stress levels will rise and cultural cohesion will disintegrate. This is a standard evolutionary response to over-population in many colonial species. [1]

Thanks to our ancient talent for tribal mysticism we will then tend to replace reality with conspiracy theories that grow and multiply automatically. These will in turn give birth to a multitude of nightmares that validate religious, ethnic and political extremism. This return to the level of savage tribalism that nursed our incompetent species through the previous ice age.

In this fashion our genes will keep us largely oblivious to the very real threats that faces our species as we slide headlong into resource depletion, energy shortage, climate change, food and water shortage and population collapse.

Our ancient ability to switch off rational thought and believe implicitly in genetically engendered 'visions' will then nurture the same old ethnic paranoia, laced with conspiracy theories founded on religious and political dogma.

Retribution for cultural transgression has often taken extreme forms, and the more tribal the society, the more extreme the retribution meted out to perceived offenders. The act of slicing off a male offender's head or genitalia is explicitly genetic in its origin, as is the rape of females who happen to be captured during the incessant tribal wars.

The extreme violence repeatedly displayed by Daish, Al Qa'eda, Boko Haram and many other terrorist cults offer us a grim reminder that human DNA responds to extreme stress in much the same the way that rodent populations do.[1]

Gobally disseminated video clips showing the beheading of prisoners that were accused of no crime other than being alien intruders displays the kind of primitive fundamentalism that once preserved our human ancestors when they first faced life as bipedal scavengers on the plains of East Africa.



ABOVE: The popularity of violent science-fiction movies and computer games shows that our tribal origins are resurfacing as our stress levels rise.

BELOW: The Middle-Eastern extremist group known as DAISH recently displayed their regression to crude tribal vengeance with an video showing how they burned a Jordanian bomber pilot to death inside a steel cage.



[1] See pp.51-52 ('Rodent research', by Southwick and Calhoun).

Fundamentalist Gangsters

*"Our time bomb is mysticism.
Its delivery system is language.
And its hiding place?*

The unfathomable coils of our DNA." [1]

By overpopulating our planetary habitat and by triggering a major mass extinction of its other inhabitants, we have switched our ancient asset—mystically reinforced tribalism—into its Faustian penalty mode.

As population pressures increase, societies gradually fragment into tribalistic sub-groups that view themselves as 'special', and view their competitors as lesser creatures. This recapitulates the origin and *raison d'être* of all religious mysticism and dredges up the savage genetic responses that reinforce such irrational tribalistic beliefs.

Emotion is the giveaway. The first hint of emotion that we feel signals that our genes have been stung into action, either by an opportunity to reproduce, or by an implicit threat to our genetic survival. From that moment on, any other judgements made by our rational cortex will be overridden or remoulded in favour of ancient genetic responses that helped to preserve our species through its hazardous development on East Africa's ice-age plains.

Territorial intruders and traitorous tribal members warranted special attention since they represented the greatest threat to the survival of the tribal genome. This gave rise to a peculiar lust for revenge against offenders. Revenge is not an exclusively male derangement, but men take the neuronal short-cut to their amygdala ('fight or flight') more readily than do most women, and their revenge too often tends to be lethal.

When our ancestors lived in caves such instinctive savagery may have rescued the tribe from early extinction. But being genetic, that once-valuable savagery lives on, undimmed in many modern humans, and when their ancient 'revenge' button is pushed, the kill rate is now vastly improved by assault rifles, high-explosives, chemical weapons and germ warfare. And so the body count continues to rise.



ABOVE: The terrorist air assault on New York's Trade Towers on September 11, 2001, became a defining moment in the re-emergence of mystic tribalism as a major factor in our species' decline.

BELOW: This massacre of Shiites by Sunni raiders in northern Iraq is one of many atrocities committed by Islamic fundamentalists on other Muslims in Iraq and Syria in recent months (Photographers: unknown).



[1] "The Spirit in the Gene" Reg Morrison, Cornell University Press (1999).

‘In Fallow Fields, the Weeds do Thrive’

As traditional religions crumble around the world, new cults spring up like weeds in fallow fields; and wherever the current crop of ‘prophets’ sow their seductive sophistries they generate a stream of passionate devotees. Inevitably, these ‘converts’ then despise all those who fail to follow, and this unity then binds them into ferocious tribal cults.

Extremist cults such as Al Qa’eda, DAISH, Jabhat al-Nusra, Lashkar-e-Taiba, and Boko Haram, all exemplify this proliferation of mystical gangsterism. Wearing the convenient disguise of traditional Islam, these gangster tribes then pursue political power, status and territory, with the aid of all the force that modern weaponry can deliver, leaving a trail of pain, death, and misery in their wake. These fundamentalist gangster tribes thereby recapitulate the primal savagery that saved our incompetent genus from ending its evolutionary days more than two million years ago in a few pools of blood on east Africa’s hazardous, ice-age plains.

Our sole evolutionary asset appears to have been an enlarged brain, armed with an extraordinary ability to imagine non-existent events and circumstances. Thanks to our brains’ unique ability to communicate those mystical fantasies via complex language, we then became able to weave those fantasies into legends that attributed a ‘divine origin’ to our physically incompetent species.

Indeed, the mutiplicity of pseudo-religious gangs that are currently emerging around the world seem well suited to their final evolutionary task: to accelerate our imminent decline. So here is the “evolutionary asset” that saved our bacon when the ice-age chips were down and having helped us to transform our habitat, it will now make a major contribution to our species’ looming collapse.

"Any evolutionary adaptation that increases a species' ability to harvest energy from its environment automatically becomes a lethal handicap whenever the birth environment of that specialisation disappears."



ABOVE: Quasi-religious gangs like Al Qa’eda and DAISH are currently multiplying all around the world, leaving trails of blood and detruccion in their wake.