KNOWN

UNKNOWNS

a
NEW BOOK
by CHARLES SAATCHI

INSPIRED
by
STRIKING
PHOTOGRAPHS



Booth-Clibborn Editions

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JUMPING from a BURNING BUILDING, a MOTHER DIES, a CHILD SURVIVES.

As flames swept through an apartment block, this was the last desperate moment of a mother falling with her child from a collapsing fire escape in Boston.

Her fall was fatal, but her body cushioned the fall of her young daughter, allowing him to miraculously survive.

The picture is a haunting reminder of the power of photography to capture images such as this – death moving too fast for the human eye, but its terror portrayed for ever.

It won the photographer, Stanley Forman, the World Press Photography Award for 1975, but also sparked debate as to the sanctity of human life and the ethics of training a camera lens on the dying.

In 2009 this controversy erupted when a photographer captured the last moments of a U.S. Marine fatally injured by a rocket-propelled grenade in Afghanistan during the last month of his tour of duty. The ‘rules’ of war photography dictate that you cannot show the face of a military casualty in order to protect their dignity and identity.

But Lance Corporal Joshua M. Bernard’s face could clearly be seen. In interviews, the photographer Julie Jacobson recalls how the grenade had blown off one of the soldier’s legs, and left the other barely there at all.



Robert Capa's *Loyalist Militiaman at the Moment of Death, Cerro Muriano, September 5, 1936.*

She made the split-second decision to take the shots, and then after seeing them she sent them off for publication.

The newswire AP contacted the family before they were released, but went ahead and distributed the images despite the family expressly requesting they remain private.

The pictures created widespread disgust across America, making an unpopular war even more distressing.

War photographs have often had the power to sway national opinion. Vietnam was one of the world's most openly-covered conflicts, and the images sent back for publication in U.S. newspapers and magazines shocked the nation and, many argued, undermined the war effort.

Both Eddie Adam's photo of General Loan shooting a suspected young Viet Cong soldier in the head, and Huynh Cong Ut's image of naked children running from a Napalm attack, served to bolster the protest movement in the U.S., and to discredit government claims that the war was a just and noble cause.

Thankfully, the terrified young girl who dominated the picture survived, saved by the photographer who used his press pass to get her medical attention, despite doctors initially saying she was too severely wounded to help.

Legendary war photographer Robert Capa shook the world through his depiction of the fragility of life during the Spanish Civil War.

Capa, a Hungarian-born photographer, covered many different wars in his career, but one shot taken in Spain propelled him to renown.

Known as *The Falling Soldier*, the remarkable image was taken in 1936 and depicted the death of the rebel Federico Borrell García.

Up until the 1970s the picture was widely considered to be a striking portrait of him being killed by a sniper's bullet.

However research then suggested that the image was in fact staged, based upon discrepancies between Capa's claim that it

was taken at the battle site Cerro Muriano, and the landscape's exact similarity to that of Espejo, a location more than thirty miles away.

In addition the subject of the image did not greatly resemble Garcia, and his death was documented having occurred whilst he was sheltering behind a tree.

Despite its now accepted status as an unreliable photograph, the picture still stands as a potent image of the Spanish Civil War.

Perhaps this is what viewers seek from war photography – a graphic symbolism that brings you uncomfortably closer to the darkness you would otherwise avoid.

The pervasiveness of cameras into our lives has meant that some who have died in natural or manmade disasters now leave behind evidence of their last moments. On 13th January 2005 the bodies of a Canadian couple were found on a Thailand beach, having been victims of the December tsunami that swept over Asia.

A relief worker from Seattle aiding the suffering found a camera weeks later, and discovered that the memory card was still intact.

When back in the U.S., he downloaded the images, and found pictures of the couple enjoying their holiday, unaware that approaching was a colossal wave that would sweep them to their deaths.

Using their photographs he was able to identify them and locate their grieving sons and daughters, and drove from Seattle to Vancouver in order to deliver these last images by hand.

Similarly the photographs of photojournalist Bill Braggart provide a startling insight into the tragedy of the twin towers on 9/11.

Braggart's body was pulled from the rubble, along with his cameras, when his assignment to cover the attack ended in his death as the second tower collapsed.

His digital camera had protected the inner memory card, and the last image was taken at 10:28am, just two minutes before the building came down.

The photographs captured office workers making a final and desperate choice to escape the flames that engulfed the buildings, leaping to their certain deaths from dizzying heights.

Film crews also caught their falls, which for some would take a full 10 seconds. Accounts tell of fireman screaming at cameramen to stop filming the jumpers, appalled at their perceived lack of decency.

As with other instances of war or conflict photography, it raises the ethical code about the pointing of lenses, 'protecting' those on the point of death.

Veteran war photojournalists have a clear perspective; their stark and distressing images perform the vital function of recording the most unpalatable of truths.



SMOG in CHINA is so THICK, a FACTORY FIRE went UNNOTICED for THREE HOURS.

Health-conscious citizens still practice Tai Chi amid the heavy smog in Fuyang city.

Air pollution has become an intense problem in large stretches of China because of rapid industralisation.

It was so heavy in the eastern Zhejiang province that a large blaze in a factory took three hours for local residents to notice. The fire was fierce enough for teams of firefighters needing a further ten hours to extinguish the flames.

The density of adulterated air in parts of China has reached levels that are 40 times the World Health Organisation safety limit.

Noxious haze often blankets Beijing, driving up sales of face masks and air purifiers to dramatic levels.

Even state news agency Xinhua stated that “a country with a brown sky and hazardous air is obviously not beautiful”, a pointed observation that the government’s promise to “build a beautiful China” was perhaps in jeopardy.

The problem is widely acknowledged politically; when the world’s eyes were on Beijing for the 2008 Olympics, the Chinese capital implemented strict measures for months in advance that reduced toxic emissions by 60%.

Car users could only drive on alternate days, construction work ceased, most factories were closed down.

Experts are urging authorities to take longer-term action to confront the consequences of the nation’s rapid industrial growth,

a nation enjoying the widespread material benefits of a massive economic boom.

The official *People's Daily* went as far as to describe the low visibility as 'a suffocating siege', with the air murky with the taste of chemicals – and the sight of blue sky a rarity.

Industrial-based pollution, according to the Chinese Ministry of Health, has made cancer China's leading cause of death.

Lead poisoning continues to kill many thousands through contaminated water, and a large percentage of its oceans are without marine life.

However, in 2007, China's environmental agency insisted that many of the negative findings established by the World Bank should not be published in order to avoid social unrest.

Only a third of the 340 cities surveyed by China itself met their national air standards. In many, the smell of high-sulphur coal and leaded gasoline is always present.

Cities ringed by heavy industry, metal smelters, coal-fired power plants, have tons of carbons, gases and soot spewed out constantly around them. Sometimes visibility is so poor airports are forced to close. In Shanghai it is commonplace not to be able to see the street from a fifth floor window.

The causes of the pollution are widespread, but much blame is placed on the million tons of a sulphurous coal burned each day to power factories, heat homes, cook meals etc.

Extensive car ownership, low-grade gasoline, and very heavy traffic have made the automobile another leading contributor to the blanket of airborne suspended particles in China's air, sixteen times higher than New York at its environmentally worst.

China has 20% of the world's population, but only 7% of global water resources.

700 million Chinese drink contaminated water every day, and they themselves believe they have achieved immunity over the years.

But what makes China's acceleration in growth more difficult for its government to deal with is its relentlessness.

Mckinsey has estimated that by 2025 they will have created enough new skyscrapers that these alone would be the equivalent of ten Manhattans in floor space.

China already consumes more steel than the U.S., Europe and Japan combined.

Despite a forceful regime that watches for breaches in accepted protocols, Chinese internet users are five times more likely to have their own blogs than Americans.

China also has 150% more armed forces than America, and many fear, more advanced technology.

It executes three times as many people as the rest of the world combined, and utilises mobile vans to efficiently administer lethal injections across the country.

And yet, there are more Christians in China than Italy; it is their fastest-growing religion, expected to become the largest Christian population on Earth.

Russia may once have been Churchill's, and the world's, enigma. Today, even more mystical, and mystifying, is China.



Pollution from a factory in Yutian, 100km east of Beijing.



There are more GUN STORES in AMERICA than MCDONALD'S and STARBUCKS COMBINED.

In April 2011 in Houston, Texas a six-year-old boy took a loaded Glock pistol to his kindergarten, and dropped it in the playground.

Bullet shrapnel exploded into the boy and also injured two classmates. It wasn't the first, nor the worst, children's gun incident in the U.S. In a Michigan elementary school six-year-old Dedrick Owens fatally shot classmate Kayla Rolland with a .32 calibre semi-automatic handgun he had brought from his uncle's home. His reason, he told Kayla? "I don't like you."

But in the U.S. it's easier to find a local gun shop than a grocery store.

There are 130,000 licensed gun dealers in America, and 51,000 operate out of retail stores; this compares to 14,000 McDonald's outlets and 13,000 Starbucks.

It is certainly true that Americans have the highest gun ownership rate in the world.

But you will be surprised that included in the top three nations whose citizens own guns are Switzerland and Finland.



Even at official gun shows, only some of the sellers are licensed and many deals are simply private cash transactions.

The most likely places to be shot to death however are Honduras, El Salvador, the Ivory Coast, and Jamaica.

In America there are 270 million firearms possessed by civilians, compared to 897,000 carried by police. There is no necessity to pass a background check to buy a gun in the U.S.

Private sales of firearms require no such procedure, making it legal to transfer guns to convicted felons; 40% of gun sales in America occur with no need for legal approval.

The existing gun laws are filled with loopholes. For example, a 1997 act that banned the sale of military grade high-capacity ammunition assault rifles was allowed to expire in 2004.

Under current Federal Law, being known as a suspected terrorist, or finding yourself included on a terrorism watch list, blocks you from being able to board a plane. However it doesn't disqualify you from buying a weapon, unless a security check at a federally licensed gun dealership shows you to have a criminal past.

In Switzerland there are 3.4 million guns among a population of 8 million. This is probably explained by the obligatory military service for all Swiss men aged between 18 and 34.

They are issued with pistols and rifles and until recently were allowed to keep them at the end of their years in the military.

After a champion skier and her brother were shot dead by an enraged spouse employing his military rifle, stricter rules have been enforced, requiring you to provide justification for keeping possession of your weapon.

But to many traditionalists, a gun at home has become a metaphor for an independent, well-fortified Switzerland, helping keep them uninvolved in two World Wars.

The leader of a lobby group infuriated at the notion of the Swiss giving up their guns pointed out: "It is a question of trust between the state and the people. The citizen is not just a citizen, he is also a soldier. The gun at home is the best way to avoid dictatorships – only dictators take arms away from citizens."

About 600,000 Swiss, many of them children, belong to shooting clubs, and in September each year 4,000 Zurich girls and boys aged 12 to 16 take part in a rifle marksmanship contest. It teaches people to respect guns, claims an instructor at the leading club.

He explains that "a lot of hyperactive children come to the rifle club. They learn to stand still and concentrate for lengthy periods of time".

"I am always amazed that America's powerful gun lobby, the National Rifle Association points to Switzerland as having a safe gun culture", adds a professor at Zurich University, "they make us sound like we are part of Southern Texas. To shoot someone who just looks at you in a funny way – that is not Swiss culture."

Why do so many Finns own their own weapons?

Their official explanation is that they are a nation of hunters, having hunted and fished for food for thousands of years; agriculture only caught up as a major source of nutrition in the 20th century.

You require a permit for hunting with a rifle or a shotgun, and also to own a gun for target practice. But this has proved no barrier to over half of Finland's population owning a gun.

Fortunately, neither the Swiss or the Finns are warlike folk, so a full-scale battle between these two well-armed populations is an unlikely spectacle for us to follow on TV.



The LAST JEW.

On the back of this photograph are written the words, “The last jew of Vinnytsia”. It was taken by a member of the Waffen-SS Einsatzgruppe D, as the last remaining jew was shot, watched by an audience of the German army and Hitler youth. 33,771 jews were killed in a single massacre on 29th and 30th September 1941 in the Ukraine.

In 1967 the united Arab nations decided to wipe out Israel during the 6 Day War, but somehow the jews managed a win; and Israel was respected again when the jews took on Black September and the PLO after the Munich Olympics terror attacks, and the hostages were rescued at Entebbe.

Nowadays, Israel is the subject of global loathing, and anti-semitism appears to be accepted as perfectly OK, even PC, on both the Liberal Left, and the Moderate Right.

In fact, could anything be more grotesque, laughable if it weren’t so alarming, than the political alliance between hardline socialists and what would be viewed as their polar opposite, Islamic fundamentalists? Clearly, they share a distaste for Western capitalism in general and Israel and jews in particular.

So we now enjoy the spectacle of radical feminists supporting regimes that routinely oppress women and make no bones about it, and card-carrying atheists championing nations where religious fundamentalism and its adherence globally is a feverishly held conviction.

A little Googling doesn’t take anyone long to discover, even when taking into account that the net is inhabited by many fruitcakes, just how much sincere distaste jews attract, just how

widespread this animosity is, and just how many people would prefer a world without jews.

I find Judaism even more daft than many other religions, and even if I believed in God I wouldn't like him much, let alone pray to him.

But here I am, too intrigued by The Jewish Question to stop gnawing at it like a bone.

"Jews are a base, whoring people,
full of the devil's faeces, which they wallow
in like swine. They should be shown no mercy
or kindness, their synagogues and schools set on fire,
homes razed, property and money confiscated.
The poisonous envenomed worms should be
drafted into forced labour or expelled for all time.
We are at fault in not slaying them."

Martin Luther, 1543

Nobody likes jews, and never have. Pharaoh didn't like his jews. The Romans didn't like their jews.

Muslim pogroms have been a regular on the calendar since 1033, and Russia's pogroms were fairly consistent from 1821–1917; Germany didn't care for its jews even back in 1348, when they killed hundreds because they were thought to be the cause of the Black Plague.



During World War II the Grand Mufti of Palestine, Mohammad Amin al-Husanyi, based himself in Berlin as a propagandist for the Nazis.

He recruited over 100,000 Arabs to fight for the Nazis in the Waffen SS.



A Socialist Workers Party demonstration in London.

The Arab countries had allied themselves with Germany, and when they invited SS experts to advise on the creation of concentration camps for jews in Arab lands, my parents thankfully got out of Iraq and were fortunate enough to find refuge in England. Other jews in Libya and Iraq weren't so lucky and were murdered in their hundreds.

Time is a great redeemer, and though millions of jews were killed in exquisitely efficient methods by the Third Reich, it is now acceptable once more to be sceptical about jews at best. And to wish them into the ovens and gas chambers again at worst. So the point is, if jews have been disliked since time began, this can't be mere coincidence. What is it about jews that have always made them just plain unlovable?

Do you happen to like jews? Myself, I'm neither a jew-hating jew, nor an Arab-hating jew. I don't go on holiday to Israel, because I'm not sure the Israelis are as charming as the Italians, and neither is their food. But I enjoyed holidays in other parts of the Middle East, and found the home crowd rather pleasant.

I very much dislike the headcase jihadists and the 'moderate' Muslim acceptance that martyrdom-by-strap-on-bomb is



The Grand Mufti of Palestine Mohammad Amin al-Husanyi and Adolf Hitler enjoying a chat. Al-Hussani is credited with being the grandfather of modern jihadist fundamentalism, and inspired the formation of the PLO, Hamas, Al Qaeda and Hezbollah etc.

After moving to Egypt at the end of World War II, he united Arab nations to join in an all-out offensive to wipe out Israel in the fateful 6 Day War. The Mufti spawned disaster for his own people – the Arabs of Palestine – as well as Zionists, and the region has clearly never recovered.

Sadly, the Arab Spring that recently produced the overthrow of many despots translated into a takeover by hard-line jihadists; after finishing-off Israel, they will have you and the rest of the infidels in their sights, and in the decades to come, aim to cleanse the world for a perfect totalitarian Islamic paradise.

perfectly fine. But I suspect that most people reading this don't actually want to watch jews burnt alive, and are as curious as I am why this has been the way of the world since time was measured.

Many genuinely nice people feel that Israel's military makes a 'disproportionate' response to Arab rockets being lobbed into Israeli cities, and having Israeli discos, cafés and citizens being blown to bits by suicide bombers. I can see how bitter many Arabs and their sympathisers may feel about Israel building settlements on little parcels of disputed land occupied after the 1967 war. But this land was won in the battle that the Arabs had waged in the first place, and is a miniscule proportion of the thousands of miles Israel overwhelmed in that war, and then handed back to the attacking nations when the battle was over.

Even someone like me, with a Fail in GCSE History, knows that borders have always been defined by wars.

Nonetheless, Palestinians obviously have a right to their own state, and Israel equally has a right to exist.

It doesn't help that Israel's religious extremists are hopelessly intransigent, as marooned in the past and as incapable of calm pragmatism as their opponents. But in general the current generation of Israelis are transparently clear that they are very different to the European Jews who meekly stepped into the gas chambers or were shot, burnt or starved to death in their millions without putting up a fight.

They want their enemies to know with great certainty that Israel will rain hell upon any nation that wants another go at clearing the jews off the map.

This stance may not win them many friends, but at least Israel is not simply using its military prowess to swoop over its Arab neighbours, control the world's oil supply and become immensely rich and very powerful. If you are already very unpopular, there's little to lose and much to gain, some could argue.

But looking at recent years, the great triumph of propaganda in the modern era has been The Plight of the Palestinians. This wondrous piece of mass communication has effectively wiped out most international support for Israel.

The Palestinian cause, scarcely blighted by suicide bombings, the use of their people as human shields, or 9/11 or 7/7, has managed to make the Israelis appear callous expansionists, likened to Nazis.

The Palestinians are held in an Apartheid hellhole, with just their rockets to fire at Israel in a vain fight for human rights.

Don't you ever wonder why the Palestinians are left to rot by their immensely rich Arab neighbours, swimming in oil billions, and endless acres of land? I hold the nasty little view that the poor Palestinians are a convenient political tool used by Islamic Fundamentalists to gain support for the justness of their cause.

Winning over an army of nice liberal-minded accomplices as useful fools aids the mission to create a perfect totalitarian Islamic world.

Certainly Saudi Arabia, Libya, and Iran could afford to arm Palestine with top notch weaponry, and lots of it.

They clearly prefer not to, so that Israel can be seen as the super-powerful oppressor, even though it is a tiny fraction of the size, with a tiny fraction of the wealth of their neighbours. They could also make sure that the $millions in world aid given to Palestine reaches the Palestinian people, instead of a few Swiss bank accounts.

In fact if they cared to, they could easily afford to transform the lives of their Palestinian brothers, but clearly prefer to let the Palestinians fester.

If jews are as clever as people would have one think, they have been incredibly inept at coping with this consummate feat of spin.

Note: Before enraged readers tell me how very infantile this view of the last 70 years in the Middle East may be, let me say

a) I am clearly no historian, but many good ones have written in depth about this subject, with great accuracy and clarity. However, nobody seems to care much what real thinkers have had to say, judging by the way the dispute continues to grind pitilessly on.

b) Like you, I am dismayed at mankind's ability to turn a vexing, Rubik's Cube of a quandary into an unfathomable catastrophe. My perspective is of the low-level, non-rigorous variety – presented in sorrow, in anger – and in simple bewilderment. But however deranged I may consider Israel's religious fundamentalists, at least they hold no desire to turn the world Hassidic, with death to non-believer heathens.



Fashionable ladies

DON’T WEAR fur,

THEY WEAR meat.

When Lady Gaga set foot onto the red carpet at the MTV Awards in LA in 2010, in her mind the world collectively gasped.

Her slender frame was covered with marbled slabs of red meat.

Cut after cut had been sewn together to form a macabre dress, with further slices tied to her platform shoes.

The outfit generated hundreds of headlines, with much thoughtful theorising about what Gaga was trying to say. Feminists suggested that the dress was a perfect manifestation of the status of women in the entertainment industry; chunks of flesh to be consumed.

More rigorous analysts decreed that as a performance artist, Lady Gaga’s meat dress was intended as a commentary on death and decay in the tradition of the Memento Mori.

Others saw it as an anti-fashion statement, intended to deconstruct the tradition of the red carpet outfit, an ironic stab at the media circus that relies on pictures of desperate starlets in daring eye-catching outfits.

To more cynical observers, she was seen as a more down-to-earth savvy media operator, intent on grabbing as many column inches as possible.

Whatever the motivation, Gaga is not the first to use extremes of dress to catch public attention; Gaga's assault simply marks an interesting new chapter in history of women's fashion, from tribal culture to the modern day.

For centuries women have squeezed, pulled, stretched and mutilated their bodies in order to fit with a subjective notion of 'beauty' – our modern day obsession with cosmetic surgery heralds a new horizon for the manipulation of the human frame.

Despite the impact of the global recession during the past few years, the number of plastic surgery operations in the UK, U.S., Europe and across the world has been steadily increasing. But intervention with Nature is nothing new. One of the oldest forms of body deformation was for both men and women, and involved binding the skull tightly as an infant in order to elongate it whilst the bone plates have not settled.

This was believed to improve our connection to the spiritual world, and to heighten intelligence, and was practiced across the globe amongst different ethnic groups. Traditional depictions of Nefertiti and King Tut show them with this strange skull formation.

The most prominent recent forms of traditional body manipulation are in Burma and China. In Burma, the Karen tribe are renowned for their women's elongated necks; from a young age they wear increasing numbers of rings placed tightly between shoulder and chin to achieve the desired effect. Many have left Burma for Thailand to become a popular tourist attraction, prompting many to speculate that this painful tribal rite is maintained solely as a lucrative business initiative, and is of no any innate relevance to the contemporary life of the tribe.

In China the practice of 'lotus foot' was widespread until it was outlawed in 1949. As a young woman you would have your feet tightly bound until the bones snapped and the foot folded over on itself.

The fashion grew from the courtesan classes in the 10th century and became widespread for all but the lowliest workers – men found the deformation very attractive, as women crippled in this way shuffled around after their husbands or lovers in a meek and submissive manner.

Manipulations of the female figure are equally a Western phenomenon.

Women throughout European history became enslaved to fashions that had a similar, literally crushing, effect.

The corset seriously affected many a woman's health, victims to constant bouts of fainting due to constricted breathing.

Whale-boned, stiff and increasingly tight, corsets were made highly fashionable in Victorian times in order to perfect the waist to a petite and desirable degree.

One celebrated dancer and singer of the time, famous as the subject of one of Toulouse Lautrec's portraits, was Polaire.

Born in Algeria she became one of the most popular performers of the day, and was famed for her bob cut, dark kohl around the eyes, and bizarrely tiny waist, less than 16 inches in circumference.

During the Renaissance and throughout the reign of Elizabeth I, women were enamored by alabaster-like skin.

In order to achieve a deathly pallor, women would slather their bodies and faces in white paste. Unfortunately the creamy whiteness provided by this formula came at a heavy price, as the concoction was poisonously lead-based.

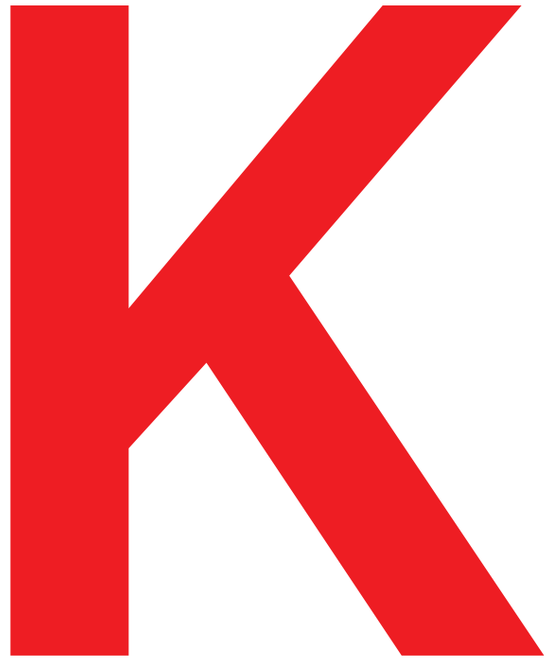
Despite the risks, women continued with the practice, redolent of today's addiction to tanning beds despite the accompanying cancer risk. Wearing slabs of meat as a frock may be a newsworthy way to gain attention, but more politically-minded women today seeking to raise awareness of their cause are using nakedness as a weapon.

The Ukrainian group Femen has recently made a controversial headlines using their technique of protesting topless. Their efforts at supporting women's rights have seen them adopt an eclectic strategy; stealing the Champions League football trophy, wave banners and their bosoms at the Pope, chop down a crucifix or two(?), block access to the Olympic park, and ringing church bells, at all times naked.

Some feminists decry Femen for obscuring real policies with their use of nudity, but the movement is steadily gaining followers across the globe, particularly amongst teenage boys.

Note: In the preceding photograph Turkish artist Pinar Yolocan presented stoic British matrons dressed only in animal flesh, for her 2003 series *Perishables*.

Besides referencing the relics of the British Empire, she alerts us once again to the contradictory relationship we have with the animal kingdom.





A DEAF BOY HEARS FIRST SOUND.

Wide-eyed, mouth agape, this little boy reacts with astonishment at hearing the first sounds of his life, having been fitted with a hearing aid.

The medical technologies available for people with impaired hearing have moved on greatly since the first bulky hearing aids.

Cochlear implants, or bionic ears, are being offered to many deaf children and adults, allowing them to hear once more.

Sound has an extraordinary range of effects on our lives, and has been put to use in a variety of surprising ways.

An Indian scientist, Dr T.C. Singh discovered after trying a number of research techniques that playing Indian Classical music to balsam plants made them grow 20% taller, and develop 75% more biomass.

He also then found that a traditional dance called Bharatanatyam, involving a great deal of foot stomping, made marigolds flower two weeks earlier than usual.

The vibrations created by the stamping of feet, and by the sound waves that reach the plant via the music, have a catalysing effect, increasing the plants' output of energy and growth.

Unfortunately sound can also be used for malign purposes.

The Mosquito is a device that emits a sound at 17.4 kHz, which cannot be picked up by adult ears, but in the young fresh

eardrums of teenagers is heard as an intolerable high-pitched screech.

It has been used in towns such as Grimsby to deter anti-social behaviour such as graffiti, vandalism and the worst crime of all – loitering.

Not surprisingly, the invention has warranted censure from observers who concern themselves that it represents a basic infringement of human rights.

A rather more subtle technique using sound as a deterrent to bad behaviour is to play classical music at sites where violence is known to flare.

At a number of tube stations in rough neighbourhoods, commuters are greeted by the strains of Brahms and Beethoven.

Sonic devices similar to the Mosquito, but lower in frequency, have been used by police forces to disperse crowds at demonstrations and protests, and even by boats wishing to dissuade Somalian pirates from approaching.

Aggressive rap and heavy metal music was used by U.S. forces to intimidate detainees at Guantanamo Bay. The music played at a deafening volume throughout the day and night, producing sleep deprivation and anxiety.

More bewildering was the use of sound during the Vietnam War by U.S. soldiers attempting to scare enemy troops away from key positions.

Named 'Operation Wandering Soul', this strategy played upon the Vietnamese belief that if a body is not properly buried the soul will continue to wander the earth in pain and suffering.

U.S. engineers developed sound recordings that mixed Buddhist funeral music and ghostly wails, and would play these throughout strategic areas of the jungle at night to terrify the Viet Cong.

The operation was completely unsuccessful; the U.S. Military had misunderstood their enemy, and the noise would only serve to draw enemy fire.

The most remarkable recordings have been recently made by scientists translating magnetic forces picked up in space. They can effectively 'hear' distant planets and phenomena.

In 2003, astronomers used NASA's Chandra X-ray Observatory to record sound waves made by a large black hole.

The recorded 'note' is the deepest ever detected in the universe, comes from over 250 million light years away, and is 57 octaves lower than middle C.

At a frequency over a million billion times deeper than the limits of our hearing ability it's not a sound we'll ever be able to physically hear.

Throbs produced by the Sun and Earth have also been picked up by satellites; the Sun produces a rather comforting pulsing sound, like that of a beating heart, whilst the Earth produces a more eerie bass note.

Spookier still however is the 'Upsweep', an unidentified sound detected by underwater microphones in the Pacific.

The sound is loud enough to be heard throughout the entire ocean and consists of a strangely reverberating rising note.

Debate in scientific circles about the origin of the sound still rages. Any solution to the mystery that you can offer would be most welcomed.



YOU can be YOUR own MUMMY.

In northern Japan, Buddhist monks would routinely commit suicide in the most horrific way imaginable to achieve mummification.

It was a technique many hundreds of monks tried, but only 24 perfect mummifications have been discovered to date, and the successful monks elevated to the level of Gods.

The process took 3 years of eating only nuts and seeds, and drinking a poisonous tea to rid the body of bacteria that would cause rotting after death.

They also kept up a strict regimen of strenuous exercise to rid their body of fat, while starving themselves for a further three years living on tree bark and roots. The tea was made with a tree sap usually used to lacquer bowls, causing vomiting and loss of body fluids, in order to make the corpse poisonous for maggots.

Finally, a self-mummifying monk would lock himself inside a stone tomb barely larger than his body, and await death locked in the lotus position. His only connection to the outside world was an air tube and a bell.

Each day he rang the bell to let his comrades outside know he was still alive. When the bell stopped ringing, the tube was removed and the tomb sealed.

After 1,000 days, his fellow monks would open the tomb to see if the mummification was successful. If so, the mummy would be placed in a temple for viewing.

But even if your body didn't mummify successfully, and all that was left of you was a decomposed skeleton, you were still admired for your dedication and fortitude.

The practice is no longer advocated by any Buddhist sect, and was banned in Japan in the 19th century, though some observers believe it continued in to the 20th century.

But reports of a case arose more recently, when inside a Tokyo home the body of Sogen Kato was discovered.

When Kato's 111th birthday rolled around in July 2010, he was hailed as the oldest living man in Tokyo.

Government officials were keen to contact him, along with other centenarians, ahead of Respect for the Elderly Day to be celebrated that September.

However, they were greeted with steely responses from Kato's family, who claimed at first that he was well but didn't want to see anyone and, contrarily, that he was suffering from acute dementia and not in a fit state for visitors.

Finally the family responded that he had holed himself up in his room about 30 years ago, declaring that he wanted to achieve saintliness through honoured Buddhist techniques.

They further explained that their grandfather was a very intimidating man, so when told to keep out of his room, the family did just that, for 30 years.

Suspicions were raised when it was found that the family had been receiving Mr Kato's pensions. This had continued for the years since his death, which according to post-mortems had occurred 30 years ago, the family simply living with his corpse.

A more homespun, and homegrown, believer in honouring your own mortal remains was Jeremy Bentham, the British philosopher born who lived 1748–1832, and founded Utilitarianism. Bentham was a self-professed hedonist, a passion he brought

into his work believing that there is only good in what is pleasurable.

In his will he requested that his body should be preserved as an 'Auto-Icon', in a manner he believed famous men of the future should be kept and displayed for the benefit of the average member of the public.

Bentham desired that his Auto-Icon be made up of his skeleton, padded out with straw and wearing his favourite outfit, and preserved head.

Unfortunately before his death in 1832, Bentham had enlisted the help of a friend to embalm his head upon his passing, using experimental Maori techniques, which had distastefully macabre results.

The skin dried a dark brown and stretched awkwardly over the skull, and was fitted with alarmingly goggling eyes.

Bentham's body was used for dissection by students according to his wishes and his skeleton filled out for display as he desired, but his head was now so unsightly a replacement was fashioned in wax, and given a few sprouts of Bentham's own hair, whilst the real head lay gently rotting hidden under a blanket between his feet for many years.

His Auto-Icon notion failed to achieve popularity among celebrated men, but his is still on display at University College London in a glass vitrine.

There was not however a peaceful, nor indeed respectful end for Bentham's head. It was kidnapped in 1975 by students who demanded that a £100 ransom to be donated to a charity shelter.

Worse was to come; after it was finally locked away in storage other students stole it for football practice.



131 PASSENGERS on the TRAIN. ONE FATALITY: the WOMAN on the STREET BELOW.

In 1885 the Granville-Paris Express overran the buffer stop at Gare Montparnasse railway station.

It careered across the first floor concourse, flew through a two foot thick concrete wall, continued to crash through a terrace, and plummeted thirty-three feet onto the street below, landing on its nose.

Only two passengers were injured, and the only fatality was a poor lady crushed when the locomotive dropped onto her.

Apparently, the problem was a faulty brake, and the delayed train speeding in an effort to make up lost time.

The engine driver received a 50 franc fine.

Another miraculous escape for passengers, whose train also over-shot the end of a platform, took place in Glasgow one hundred years later.

Again, a braking system failure was the cause, and though the train crashed through shops at the front of Larg station there were no serious injuries. But the reconstruction of the terminal took ten years to complete.

In the early days of rail travel, very few people were killed in train wrecks; locomotives moved slowly and journeys were relatively short.



A replica of the Montparnasse train crash created on the set of *Hugo* (2011), directed by Martin Scorsese.

The first U.S. disaster was in 1853 when a train ran through a drawbridge, and plunged into the Norwalk river in Connecticut: 48 were crushed to death or drowned.

Britain's first rail catastrophe was in Scotland in 1915, when a train carrying troops collided with two passenger trains near Gretna Green: 227 were killed.

France also lost a troop train when 550 were killed in a derailment in 1917 at Modane.

In Mansi, India, in 1981 a train carrying 500 passengers braked to avoid a cow, sending the carriages plunging off a bridge. Nobody survived.

Of course, travelling by train isn't always a commuter hell. Many sophisticated travellers firmly believe that few joys can compete with viewing the most picturesque corners of the world by train.

All these journeys are highly recommended by *Travel & Leisure* magazine.

1. Rocky Mountaineer, Canada

The original Rocky Mountaineer route from Vancouver to Calgary follows the 1885 Canadian Pacific train route through Western Canada and the Canadian Rockies. You'll see pristine wilderness: black lava cliffs and canyons, glacial lakes, turbulent rivers, bighorn sheep, and maybe even a black or grizzly bear.

2. Darjeeling Himalayan Railway, India

The romantic eight-hour trip on this whimsical Lilliputian 'Toy Train' from the Siliguri, in the foothills of the Eastern Himalayas, to the hill station of Darjeeling offers views of Himalayan peaks

as high as 7,400 feet. You'll traverse through dense jungle, verdant valleys, tea gardens, and forests of maple, chestnut, pear, cherry, and cardamom trees on this two-foot wide, narrow-gauge line.

3. Semmering Railway, Austria

Departing from Gloggnitz, the hour-long Semmering crosses the Austrian Alps' Semmering Pass to Mürzzuschlag. Completed in 1854 – before the age of dynamite and tunnel-drilling machines – it passes over 16 viaducts and through 14 tunnels, all carved by hand into the rock. It's one of the masterpieces of civil engineering from the pioneering days of railway building.

4. West Highland Line, United Kingdom

Britain's most stunning railway links the ports of Mallaig on the West Coast of Scotland with Glasgow. The 90-minute journey skirts sombre lochs, lonely glens, moors, and castles before arriving at the aquamarine coast with views of the Small Isles Eigg, Muck, and Rum.

5. El Chepe, Mexico

The most modern, comfortable passenger train in Mexico chugs along the Ferrocarril Chihuahua al Pacifico, also known as the Copper Canyon Railway. The 13-hour trip connects the mountainous arid interior of northern Mexico with the Pacific coast, passing sheer canyon walls, waterfalls, high desert plains, and the imposing landscapes of the Sierra Tarahumara.

6. Douro Line, Portugal

The 19th-century steam train, pulled by a diesel locomotive, clings to the steep, rocky ravine along Portugal's Douro River. The ride, which takes an hour and a half, offers views of the country's famous Douro wine region and its charming villages, vine-covered terraces, and olive groves.

7. The Ghan, Australia

This two-day transcontinental north-south line brings you from the bushlands and pasture surrounding Adelaide through the desert scrub and gum groves of the Clare Valley to the rust-colored Red Centre (home to Uluru rock), and on to the lush tropical zone of the Top End. The ride finishes in Darwin, the relaxed capital of the Northern Territory.

8. Bergen Railway, Norway

Northern Europe's highest railway overlooks some of the most pristine glacier-carved fjords in Norway. The seven-hour train crosses the high mountain range between Oslo and Bergen, then runs across the windswept, barren Hardangervidda mountain plateau, the largest protected wilderness area in Europe. Later it descends through lush valleys to the Hanseatic city of Bergen.

9. Hiram Bingham Orient-Express, Peru

This 1920s-style Pullman train winds past misty mountains and the turbulent rapids of Peru's Urubamba River toward the Inca citadel of Machu Picchu. The seven-hour route starts in high plains, continues through agricultural terraces from the era of the Incas onto the famous lost city of Aguas Calientes.

10. Birnina Express, Switzerland and Italy

Travel from St Moritz's icy alpine glaciers to the swaying palm trees of Tirano, Italy, on one of the steepest stretches of track in the world, built without rack rails, pinions, or cables. In the summer, travellers ride for two hours in an open-air carriage.

There are few severe rail accidents in the world each year, just as there are few airline crashes.

Many more fatalities and severe injuries occur on the world's roads.

However, in the EU numbers are falling. Strict enforcement of drink driving legislation, better road design and construction, improved vehicle safety standards, lower speed limits, have all helped.

Reducing lorry overloads is also considered a prime life-saver.

Nonetheless, in Europe nine out of ten deaths involving transport accidents still occur on roads, with the proportion even higher around much of the world.

For example, in Brazil 40,000 a year die on their roads; one major accident involved 300 cars.

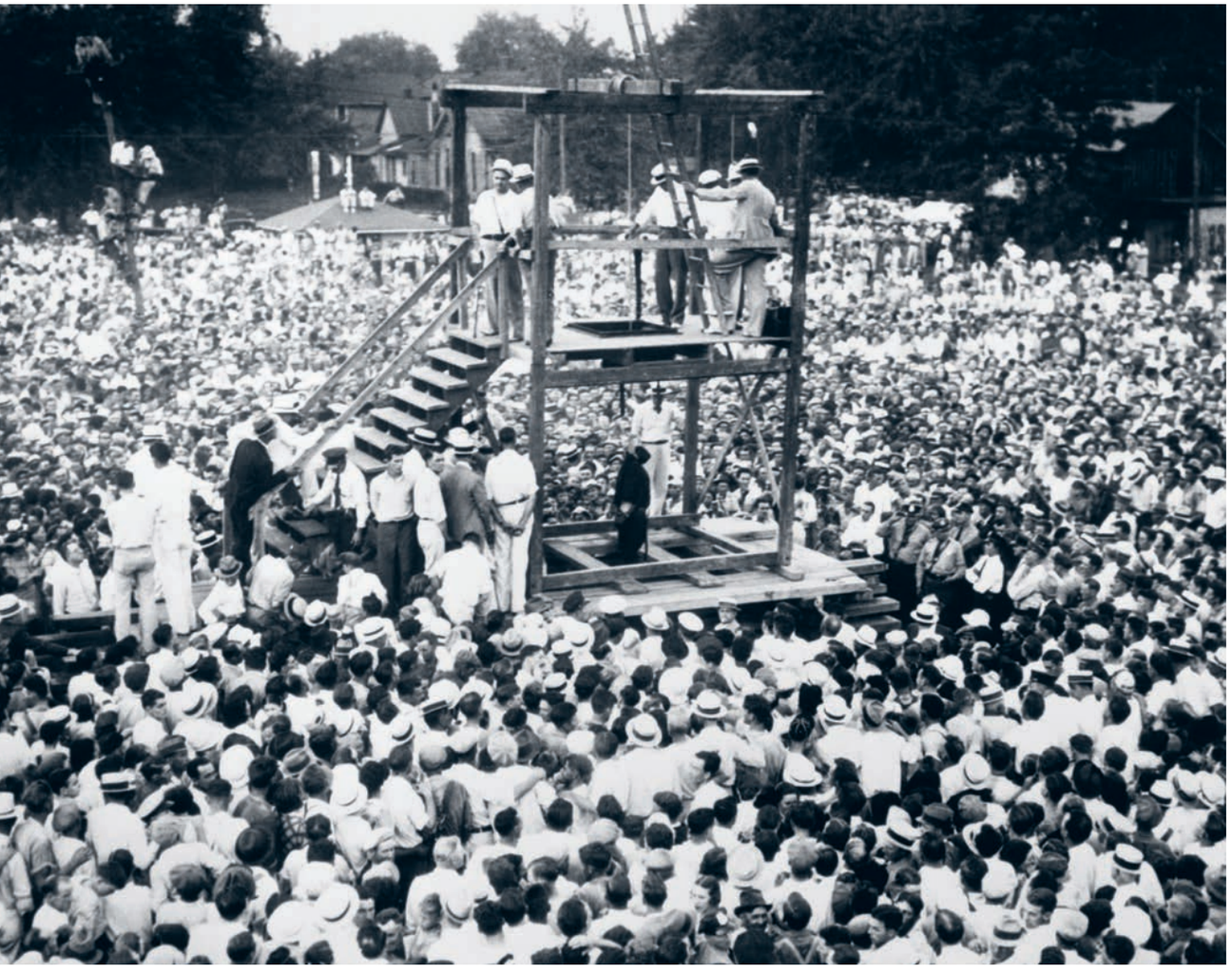
In the U.S. however, suicide is now the cause of more deaths than car wrecks.

And alarmingly, America also reports that firearm fatalities will exceed traffic deaths for the first time in the next two years, hitting 33,000 annually.

As the number of road deaths have dropped to their lowest since 1949, you are more likely to die of a gunshot wound than a car accident.



Britain's worst crash in Harrow in 1952 involved three trains carrying 1,000 passengers, including a school outing. 112 were killed, 88 seriously injured, but many lives were saved because 150 American doctors and nurses were serving at a local air base, and promptly on hand.



Owensboro, Kentucky, 4th August 1936.

A CROWD of 30,000 WAIT for HOURS to SEE the LAST PUBLIC HANGING in AMERICA.

The last public hanging in the USA was that of Rainey Bethea in 1936, an itinerant black labourer who had confessed to the rape and murder of an elderly wealthy widow.

Between 1608–2002 an estimated 15,269 people have been executed in the USA.

Before we get too self-righteous it is best to remember that under the reign of Henry VIII, 72,000 people are believed to have been executed, by methods such as boiling, burning at the stake, hanging, beheading, and drawing and quartering.

It was also the British who introduced the death penalty to the USA when it was our colony.

The case of Rainey Bethea is a controversial one, highlighting the divisions in American society at the time, and the endemic racism that pervaded most legal proceedings.

Rainey was an orphan, who in later life was regularly jailed for small infringements of the law, including breach of the peace, grand larceny (for stealing two purses), house breaking, and being drunk and disorderly.

On the morning of 7th June 1936, a couple of months after being released from jail for being unable to pay the fine for the latter crime, he allegedly broke into Lischia Edwards' house in the early morning. On waking her he choked and violently raped the poor woman, before running out with several rings, conveniently leaving behind his own celluloid prison bracelet.

Neighbours discovered the old woman's body later that day, and police apprehended Bethea, having deduced who had committed the crime based on the discovered plastic bracelet.

They also believed they were able to verify his presence in the room through the new technology of fingerprinting.

Once arrested he confessed three times to the crimes, and helpfully revealed where he had hidden the jewellery to the police.

He was tried in Owensboro, but after retracting his confession was said to be 'unhelpful' to his attorneys, who were unable to locate the witnesses he had named as being able to provide an alibi.

The charge of rape was punishable by death through hanging in that county, whereas the crime of murder could be sentenced to electrocution at the state penitentiary.

The defence did not call any witnesses or cross-examine the witnesses for the prosecution.

After one hour and forty minutes the jury returned a guilty verdict.

Post-sentencing, a group of black lawyers attempted to overturn the decision citing the fact that Bethea had been pressured to make a guilty plea, and his request for witnesses had been ignored. Their attempts were unsuccessful.

I have no clue obviously whether he was the perpetrator or not, and it is commonplace for confessions by the guilty to be withdrawn after they have had time to consider the options.

But the lack of a fair legal defence would make the verdict unreliable, and would not be acceptable in any civilised court today.

What really drew the crowds to Owensboro that day was not so much the spectacle of a young man walking to his death, but the fact that the Sheriff of Daviess County was a woman, and would be the first to preside over an execution.

The sight of this matronly lady officiating over the death of a young black man was a treat not to be missed, and newspapers across the nation sent reporters to cover the events.



It was a disappointment for those spectators who had hoped for a spot of Southern-style bloodletting, and a woman executioner.

Sheriff Florence Thompson remained in a car at the foot of the scaffold, and it was G. Phil Hanna, a farmer from Illinois, regularly acting as hangman across the country, who pulled the lever that plunged Bethea eight feet, breaking his neck.

The crowd politely dispersed, failing to even to grab the shoes that the victim had removed and left on the ground before mounting the scaffold.

Despite this, many newspapers reported that it had been a carnival-like celebration, and that people all rushed forward to strip the body, desperate for souvenirs.

This media hoopla embarrassed the Kentucky House of Representatives, who moved to repeal the death sentence for rape. Hangings thenceforth were also conducted privately.

A study of the statistics surrounding the death penalty in the U.S. is revelatory.

Bethea's death came at the peak of executions in the country, with 3,644 people sent to their deaths between 1925–49.

Despite the early 20th century being a progressive time in which many states abolished capital punishment, the social upheavals that were to come later lead to five of the six abolitionist states actually reinstating it.

This was largely due to increasing national paranoia following the Russian Revolution, and the beginning of socialist protest in America.

Prohibition and the Great Depression added to the numbers of people criminalised and killed.

Hanging had been the most popular form of execution, but was replaced by electrocution. A small number of prisoners were gassed to death.

These methods were largely replaced in the 1980s by lethal injection, a triple drug cocktail administered in stages.

The first shot is of a barbiturate, which shuts down the nervous system of the prisoner. The second paralyses the muscles, halting breathing. The third is of Potassium Chloride, and this stops the heart.

The lethal injection, like hanging, gassing and the electric chair before it, is an imperfect method for killing someone.

A team of researchers at Amherst College found that inmates have caught fire when being electrocuted, or slowly strangled during hangings rather than having their necks broken, and that lethal injection can sometimes take agonisingly long to kill.

Poor Romell Boom. Doctors tried for two hours to find a suitable vein to inject, and finally Boom tried to help them. But perhaps he was fortunate; he remains on death row having had his execution cancelled.

Angel Diaz took 34 minutes to die after being injected.

Witnesses reported that he gasped and grimaced during the procedure and an autopsy revealed chemical burns on his arms.

It was later stated that he probably died from "progressive suffocation", caused by the barbiturates, and the potassium would have caused a severe burning sensation throughout his veins.

However vile his crime might have been, it is certainly not government's right to be official torturers.

If it is the state's desire to administer a death sentence it can be achieved with certainty, and yet humanely.

Dignitas, the assisted-suicide clinic in Switzerland is perfectly capable of dispatching people who wish to end their lives, utterly painlessly.

Why should they be able to execute people more efficiently than prisons?

The BUS that was BLITZED in BALHAM.

During the afternoon of 7th September 1940, German aircraft appeared over London.

There were 348 bombers, accompanied by 617 fighters that blasted London with a variety of bombs for two hours.

Later that evening, guided by the fires created across London, a second wave of attacks continued through the night.

The Blitz was Hitler's strategic move to demoralize the population by destroying London, forcing Britain to come to terms.

The Luftwaffe rained bombs on the capital for 57 consecutive days and nights, and the raids carried for 267 days over 16 British cities.

Extraordinarily, the bombings neither crushed Britain into surrender, nor did they significantly damage war industries, that continued to operate and expand.

However, fires consumed many parts of London and residents fled to the underground stations that sheltered up to 170,000 during each night.

450 people were killed in the worst explosion that destroyed a school being used as an air raid shelter.

Targeting city populations was a new weapon of war, aimed at to causing maximum terror to civilians, rather than to soldiers on the battlefield.

Luckily for Britain, Hitler called a halt to the raids in order to move his bombers East, in preparation for Germany's invasion of Russia.

Witnesses of the London Blitz describe how every few minutes a new wave of planes would arrive, and that their motors seemed

to grind rather than roar, with an “angry pulsation like a bee buzzing in blind fury”.

Nonetheless, the Blitz resulted in relatively fewer casualties than Churchill’s response.

The British bombing of Hamburg alone inflicted 42,000 civilian casualties.

In essence, the Luftwaffe assaults failed in a number of strategic ways: they misread the fortitude of the British, and they failed to properly target Britain’s war industries, frequently switching targets without exerting sustained pressure on any one of them.

They ignored the advice of their former Chief of Staff, Walther Wever, who had championed strategic bombing, rather than terror attacks.

He outlined four key strands for the Luftwaffe’s air strategy, which thankfully Hitler’s deputy Hermann Göring failed to implement:



1. To destroy the enemy air force by bombing its bases and aircraft factories.

2. To prevent the movement of large enemy ground forces to decisive areas by destroying railways and roads, particularly bridges and tunnels, indispensable for the movement and supply of troops.

3. To support naval operations by attacking enemy naval bases, and build a protective screen of fighters around Germany’s naval bases.

4. To paralyse enemy armed forces by halting production in armaments factories.



Hitler was more attracted to the political aspects of bombing – he knew that terror had worked for him earlier after he had threatened lesser nations into accepting German rule.

But some cities in Britain’s industrial heartland were targeted; Coventry was three-quarters destroyed in eleven hours of relentless bombing, leaving many thousands homeless and 568 dead.

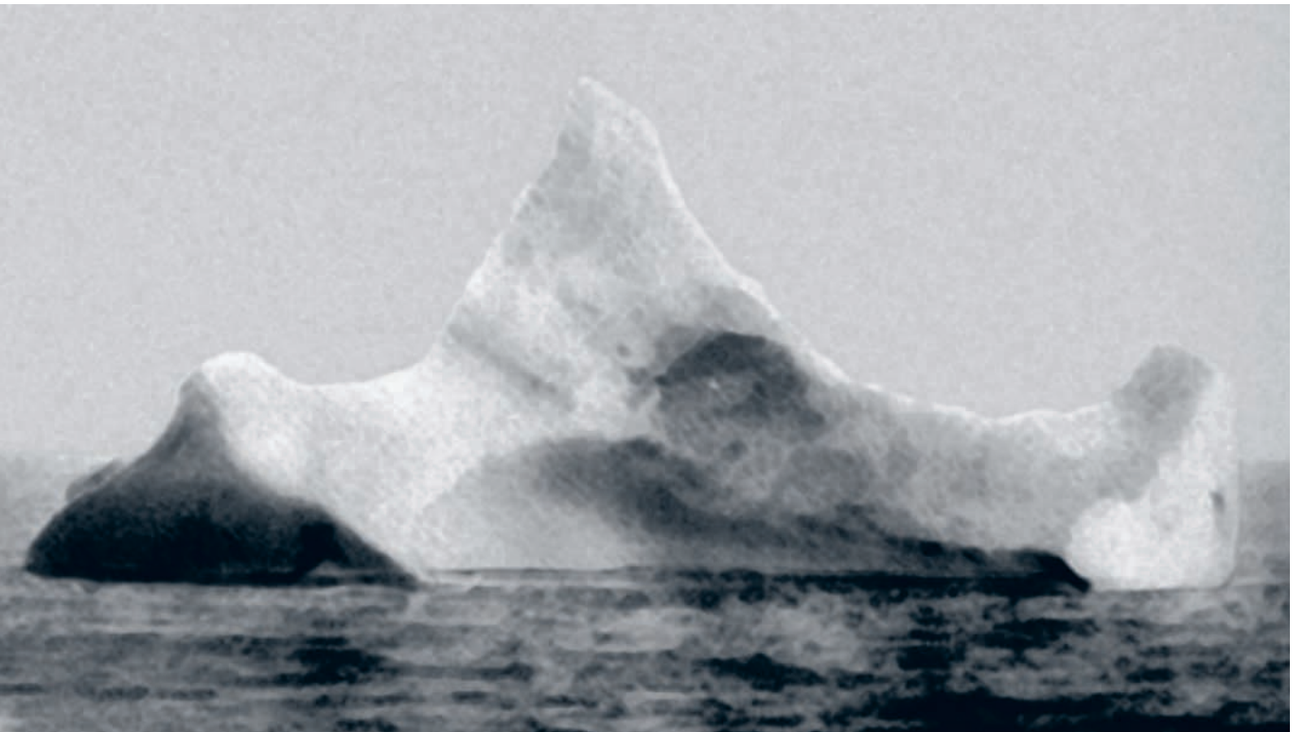
A survivor of the severe onslaught on Coventry was then a 14-year-old schoolgirl. Interviewed in recent years, she remembered that the people of Coventry believed that the Government had sacrificed their city, so as not to alert the Nazis that Britain had managed to crack their secret codes.

Had the War Cabinet suddenly increased air defences around Coventry, knowing in advance what the Luftwaffe were planning, it would have made clear to the Germans that their military codes had been compromised.

It says a great deal about the people of Coventry, she explained, that they came to accept the reasons for Churchill’s decision; breaking the German codes had been critical in winning the war, and Coventry’s fate was one of the terrible costs that had to be borne.

And, she said, once the bombs stopped falling, the people of Coventry set about rebuilding their magnificent cathedral.

The ICEBERG that SUNK the *TITANIC*.



Captured by the chief steward of the German ocean liner SS *Prinz Adalbert*, this image pictures the iceberg that sank the SS *Titanic* on the 15th April, 1912.

The steward, who did not know that the *Titanic* had sunk just 12 hours earlier, snapped the iceberg as he'd noticed a tell-tale streak of red paint all the way along it – evidence of it having been struck recently by a ship.

The story of the fateful journey of one iceberg to collide with the metal hull of the world's largest passenger liner is over three thousand years in the making.

Born from snow fallen on Greenland in 1000 BC, compacted into dense ice and pushed as a mountainous glacier out to sea, the lapping motion of the water would have carved this iceberg and sent it on its way.

Travelling from the Bay of Biscay down into the Atlantic is no small feat for an iceberg; only 1% reach as far, with waters growing too warm to sustain ice for long.

At 11:40pm on the 14th April, it met its destiny, carving a wide gash on the starboard side of the doomed *Titanic*, opening five of its sixteen watertight compartments to the sea, enough to sink this feat of engineering in under three hours.

Recent research by Professors at Texas State University have suggested that the circumstances of the collision are even more

extreme and unlikely, due to a rare conjunction of the Earth, Sun and Moon.

When the *Titanic* was making its maiden voyage the moon was closer to the Earth than it had been for more than 1,400 years, dramatically affecting the oceans.

But the Moon's proximity was matched by an alignment with the Sun, causing exceptionally high spring tides; many icebergs began to litter the northerly path between London and New York.

Most experts refute the idea that the *Titanic* had been ordered to go full-speed by White Star Line, in order to impress its passengers and the world's media, as depicted in the movie by James Cameron. They point out that SS *Titanic* had been built for size and comfort, not speed, and so had no scores to settle on that front, as a probable cause of the accident.

There were of number of other pseudo-scientific notions about the cause of the sinking; it was due to the presence on board of the 'unlucky mummy'. Discovered in Egypt and purported to be that of a Priestess of Amen-Ra, the mummy was donated to the British Museum after its purchaser hit a run of dismal luck.

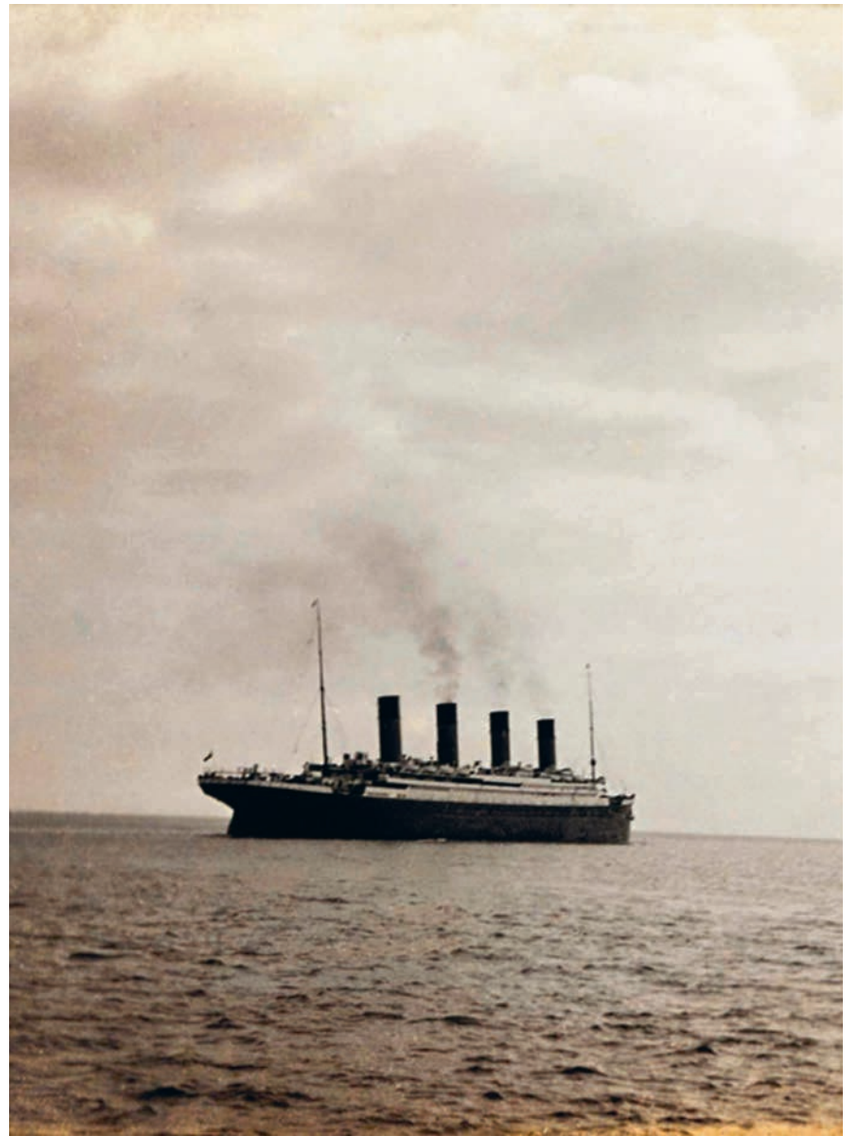
It was then apparently bought by William Stead, the forefather of the modern day tabloid newspapers, who concealed the mummy on the underside of his car and smuggled it onto the *Titanic*.

In those superstitious times, many believed the mummy's dark magic caused the tragedy to unfold.

Stead lost his life on the night of the sinking, helping women and children on to the lifeboats and giving his own lifejacket to another. Ironically he had published an admonishing article over twenty years earlier on a boat disaster where the lack of lifeboats lead to unnecessary deaths.

One of the most controversial theories was put forward by Robin Gardiner in his book, *Titanic: The Ship That Never Sank*?

Gardiner draws on several events and coincidences that occurred in the months leading up to the sinking, and concludes



The last known photograph of the *Titanic* as it departed Queenstown, Ireland, for New York.

that the ship that sank was in fact *Titanic's* sister ship *Olympic*, disguised as *Titanic*, in an insurance scam.

Olympic was the older sister of *Titanic*, built alongside the more famous vessel but launched in October 1910. Her exterior profile was nearly identical to *Titanic*, save for small detailing such as the promenade deck windows.

Olympic had recently been involved in a major collision with another vessel at sea, and was subsequently found to blame, with White Star's insurers Lloyd's of London refusing to pay out on the claim.

Engineers' commitment to repairing the *Olympic* meant that the *Titanic's* completion date would have to be delayed; having both ships out of service would create a serious financial loss for the company.

Gardiner proposes that to make sure at least one vessel would be earning money, *Olympic* was then converted to become the *Titanic*. Gardiner states that few parts of either ship bore the name, other than the easily removed lifeboats, bell, compass binnacle, and name plates.

The plan, Gardiner suggests, was to dispose of the Olympic in a way that would allow White Star to collect insurance money on the ship. He claims that the seacocks were to be opened allowing water to gradually flood the vessel. If numerous ships were stationed nearby to take off the passengers, the shortage of lifeboats would not matter as the ship would sink slowly, and the boats could make several trips to the rescue all those on board.

One of Gardiner's most controversial statements was that the supposed 'Titanic' did not strike an iceberg, but instead collided with one of the rescue ships that was drifting on station with its lights out. Gardiner based this hypothesis on his calculations that an iceberg could not inflict such sustained and serious damage to a steel double-hulled vessel.

As for the true *Titanic*, Gardiner alleges that she spent 25 years in service as the 'Olympic'.



HUNTED to NEAR EXTINCTION, a BOUNTY of BUFFALO SKULLS.

This grisly mountain of skulls is perhaps one of the best representations of the clash that occurred between the settlers of America and the ancient cultures that had balanced its ecosystem for centuries.

Here, thousands of bones wait to be crushed into fertilizer, signifying a scale of hunting that would push the buffalo population of the continent to the brink of extinction.

Buffalo, or more accurately the American bison, were reduced to pockets of 60 or 70 animals, hiding out deep in national parks, or preserved by forward-thinking ranchers. At one point it was estimated that 100,000 buffalo were being killed every day by commercial hunters, who were at first interested only in the valuable pelt, and in a final cruelty left the rest of the body to decay on the Great Plains over which the vast herds had roamed.

The hunting of these beasts to such extremes was enmeshed in the U.S. government's attempts to undermine the existence of Native Americans, who had until then relied upon the buffalo as a main source of food.

With herd numbers rapidly dwindling starving Native Americans were forced to abandon their ancestral lands and

move onto the reservations that had been allocated them by the government.

Indeed President Ulysses S. Grant refused to sign a law to protect the buffalo, instead providing hunters with free bullets when they moved south into Kansas; these hunting grounds were supposedly protected by treaty for the Indians.

The buffalo had occupied a central place in the lives of the Native Americans who populated North America and Canada.

In myth and legend they are represented as noble beasts, willing to lay down their lives in order to provide food to the tribe.

A carcass could provide not just food, but clothing, medicine and shelter. Buffalo symbols were central to sacred ceremonies of many tribes, serving as a passage to the spirits.

Skulls were placed on lodges and teepees protecting them from evil intent. Early hunting techniques, before the use of horses, were inventive.

Groups of hunters, who were specialised 'buffalo runners', would disguise themselves as coyotes and wolves, driving the animal down a canyon or over the lip a waiting cliff. The poor buffalo would plunge to its death, with the falls being given names such as 'Head-Smashed-In', in the Rocky Mountains.

But with the arrival of Europeans to the continent came the start of the mass commercial hunts that would soon lead to the decimation of the herds.

Large profits were made from the buffalo hides, which were exported to Europe and used for industrial machine belts, coats and rugs.

Hunting was developed to a fine art, involving teams of gunmen, skinners, gun cleaners, cartridge re-loaders, cooks, wranglers, blacksmiths, security guards, horses and wagons.

Pelts could fetch $3 to $50, a princely sum given the average labourer wage was a dollar per day.

As part of the industrialisation of hunting, the introduction of the rifle made mass-killing of bison extremely simple.

Not renowned for their cunning or intelligence, the bison would stand in their herds, patiently allowing the hunters to pick them off one by one.

Riflemen would shoot them in the lungs – head shots rarely succeeded in killing the beasts as the soft lead bullets often failed to penetrate their thick skulls.

A large number of them could be killed in a short amount of time – one hunter calculated that he had killed 20,000 in his professional life.

From 1873 there were several hundred commercial hide-hunting organisations providing trainloads of pelts to the East.

32 million pounds of buffalo bones were also shipped to be turned into fertilizer, horns were turned into buttons, combs and knife handles.

The railroad became a grateful accomplice in the slaughter, allowing great volume to be traded. Railroad owners actively encouraging hunting, as the buffalo would take cover from the winter elements in the deep crevasses carved by the railroad companies through the hills for their locomotives.

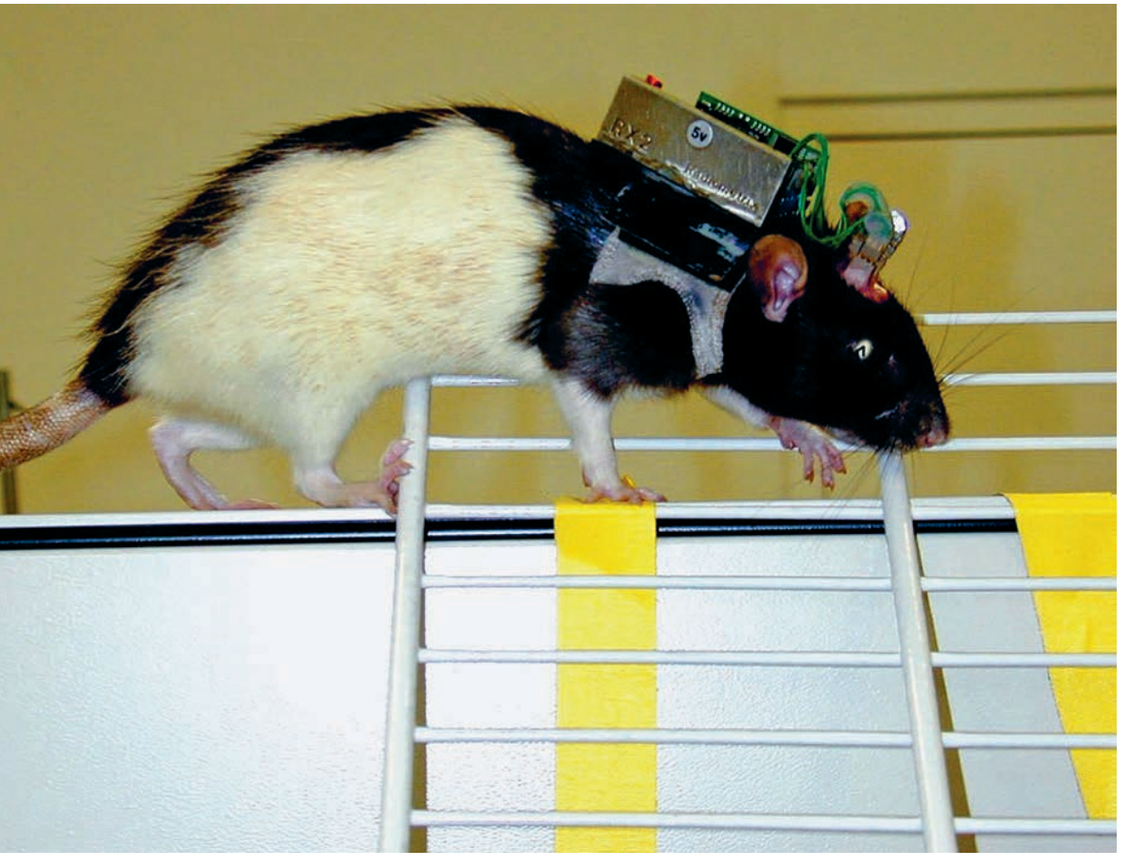
It was troublesome for the railroads that trains would run into buffalo, and be damaged; or it could cause long delays clearing a herd that refused to move.

Thankfully, bison stock in the USA has since grown after the species were protected from hunting, and the cultivation of the breed in national parks and in private ranches.

The domestication of bison has always been fraught, however. Fences are particularly apt to give out under a bison attack, given that they can run at 40 mph and jump over 6 feet.

Interbreeding with cattle has allowed for a genetic diversity, but has meant that there are very few true bison remaining.

There are now 15,000 wild bison left in the USA, and an additional 500,000 in private ranches. But the buffalo's future is looking more optimistic, though much reduced from being the most populous mammal on the planet.



MEET ROBO RAT, the FIRST LIVING REMOTE CONTROLLED RODENT.

In New York's State University Medical Centre, a remotely guided rat was developed in 2002.

Electrodes were implanted in the rat's brain cortex, with a backpack attached carrying a radio receiver and electrical stimulator.

The rat receives a sensation in its whiskers, that then delivers to its a brain feelings of pleasure and reward.

With a little training the rat can be remotely directed to move left, right, or forward in response to whisker stimulation signals.

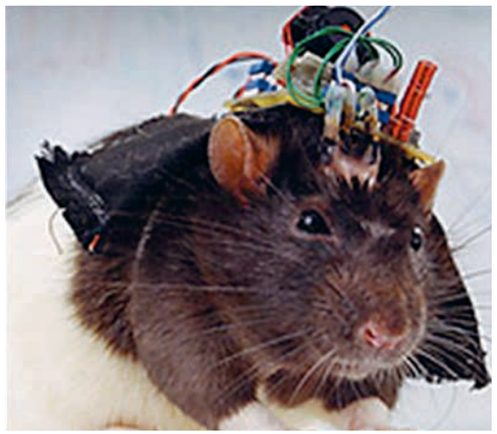
They succeeded in guiding the 'Roborat' through an obstacle course, jumping small gaps and scaling constructions.

This initiative wasn't merely youthful scientists seeking entertainment by experimenting on a rat's brain functions.

The 'Ratbots' are being trained to detect explosives in areas where humans or conventional bomb detection robots cannot effectively search; within crowds of people, or on cargo ships.

They also can assist in search-and-rescue operations following a manmade or natural disaster, and for military use such as landmine detection.

Besides the camera that can simply be attached onto the rat's backpack, additional information can be gathered by the rat's own sense of smell, to seek out chemical or biological toxins.



The Ratbot with electrodes implanted in its brain cortex.

The roborat can be guided wirelessly, a great advance on stimulation of test animals confined within an experimental chamber.

Animal rights groups have protested vigorously. A Trust funding alternatives to animal research in medicine characterises the work of creating a rat robot as “an appalling example of how the human species instrumentalises other species”.

Defenders of the programme insist the rats are trained, not coerced, into specific behaviour.

But opponents recall the earlier work of Dr Delgado, a controversial scientist who was able to pacify a charging bull by fitting electrodes to its brain. He was also said to be able to control cats and monkeys like ‘electronic toys’.

It appears that, for the present, extension of the rat project to higher animals is unlikely, for ethical reasons.

There are already examples of robots that are in bionic human form.

Seven foot tall Rex is fitted with the latest in prosthetic limbs, a functioning heart system, and a bionic kidney.

Rex even has a degree of artificial intelligence. He can hear you and respond using a speech generator.

He will be touring the world’s science museums, so you may soon be able to have a chat with Rex, looking directly into his pleasant face, fine complexion and convincing eyes.

Robots are generally unpopular when used in industry in a growing number of tasks, able to replace workers and jobs.

Inspired by colonies of insects, researchers are modelling ‘swarm robots’, thousands of tiny models which together can perform useful tasks, whether it is cleaning, or spying, rather like the spider robots in *Minority Report*.

And of course there have been a number of fantasy film adventures with robots gaining authority and battling humankind, in an Oedipal desire for supremacy.

Hollywood has produced many memorable robot stars. The replicants in *Blade Runner*; the malfunctioning gunslinger in *Westworld*; Sammy, the star of *I Robot*; C-3PO and R2D2 from *Star Wars*; Ash, the mysterious passenger aboard spaceship Nostromo in *Alien*; Arnold Schwarzenegger’s Terminator and Robocop.

And of course, the creation resembling a magnificent jukebox, Robby the Robot in the 1950s classic *Forbidden Planet*.

It appears Robo-stars are every bit compelling as most Hollywood icons.

But possibly we would miss the real Angelina Jolie, Cary Grant, Marilyn Monroe, George Clooney had they been replaced with Rex grade stand-ins.



The KLAN on the MARCH in WASHINGTON, 1925.

In 1925 in the nation's capital, over 40,000 members of the white supremacist group gathered in a display of power and numbers, visually proclaiming the height of Ku Klux Klan influence in the USA.

However, the number of Klan members was already dwindling when the photograph here was taken, as the group was becoming beleaguered in legal actions, journalistic enquiry and public scandals.

Whilst the graininess of this shot historicizes the group, they remain a real and active threat in the USA, boasting between 3,000 and 5,000 members as of 2012. This secret society of violent racists was born out of the turmoil at the end of the Civil War.

Defeated Confederate veterans returned to the ruins of their home states, and in the power vacuum that persisted, they were able to act with relative impunity, violently attacking newly emancipated blacks, and whites who supported the Republican Party and civil rights.

They preferred night raids on the homes of their victims, firebombing and shooting into their houses, wreaking horrific vengeance as a warning to others.

Lynchings were also used more specifically to intimidate voters turning out for elections who might vote Republican.

More than 2,000 were killed or wounded in Louisiana prior to the Presidential election of 1868, and as an example, in St Landry Parish, with a previous majority of 1,071, no Republican attempted to vote.

At this point the Klan was not a centralised organization, and consisted mainly of rag-tag vagabond groups in rural areas of the American South, under the anonymity lent to them by their hooded outfits.

The first avowed Klan dogma was developed by former Confederate Brigadier General George Gordon, who worked to formalise white supremacist beliefs.

Joining-up required a swearing-in ceremony calling upon each potential member to declare their support for the reinstatement of the Confederacy, and the dismantling of equality between whites and blacks.

Their reign of terror was a better organised and bloodier one, with nightly raids taking a heavy toll on the newly freed blacks of the American South.

In just North and South Carolina, over the course of 18 months ending in June 1867, there were 197 murders and 548 cases of aggravated assault.

Two years after its official creation, President Ulysses S. Grant signed the Ku Klux Klan Act, which worked with the Force Act to suspend Habeas Corpus, leading to the widespread arrest of Klansmen across the south.

Despite the decimation of Klan numbers and gradual disbandment of Klan groups in the years after 1868, the intentions of the Klan were nevertheless achieved through violent racist intimidation.

The second wave of the Klan was far more widespread than the first, and more sinister in its establishment and systematisation of a Klan mythology and centralised structure.



A Georgia State Trooper at a Ku Klux Klan protest in the 1980s. Standing in front of the black trooper, and touching his shield, is a curious little boy dressed in his Klan hood and robe.



This was prompted by the D.W. Griffith film *The Birth of a Nation*, released in 1915, which documented the end of the Civil War, and glamourised the Ku Klux Klan as a heroic force for good in the south, fighting against sexually predatory blacks – played in the film by blacked-up white actors.

The film was so supportive of the Klan that the premier in Atlanta was accompanied by a parade of Klan members in full regalia.

It drew from the play and book *The Klansman*, by Thomas Dixon Jr. who himself drew heavily on the literary output of Walter Scott Thomas, incorporating traditions in Scottish and English mythology to create a new and mangled version of the Klan.

It was Dixon Jr. who introduced the burning Latin cross as a symbol, loosely basing these on the Scottish practice of burning the St Andrew's cross to muster forces.

Initial recruitment to the Klan was sluggish but numbers rapidly multiplied after founder, William J. Simmons, recruited two highly regarded publicists to further its reach.

The newly established Klan was now united against immigration, Catholicism, Judaism, Republicanism and was pro-prohibition; this was a widespread response to the start of the Civil Rights movement and the mass arrival of new families from eastern and southern Europe.

At its peak in the mid-1920s, the organisation claimed to include about 15% of the nation's eligible population, approximately 4 to 5 million men, each paying membership fees to the Klan and wearing the official robes.

The reach of the Klan was now extensive, with high ranking members achieving high positions within the police force and governmental posts – even the appointment of a Senator.

The evolved version of the Ku Klux Klan was characterised by extreme secrecy, fervent religious ritual and dogma.

Entering into this world was to be introduced to a hierarchy of Imperial and Grand Wizards, Dragons, Pages, Squires and Knights.

The jargon developed by Klansmen was ornate and impenetrable; after recruitment by an Imperial Kleagle (recruiter), a Klecktoken (initiation fee) will be demanded of you by a Kligrapp (secretary) of your Klavern (local organisation).

You will then be declared a Kloreroe (delegate) given a Kloran (ritual book) and be presided over by an Imperial Kludd (chaplain).

Legal attempts to right the wrongs of the Klan remain powerful in the U.S. The fight against their terrorist activities throughout the last century continues today, with convictions for atrocities committed many years past still regularly being achieved at court trials.

As late as 2007, James Seale, 71, was arrested for the murder of two young African Americans nearly 43 years after their deaths. They had last been seen at an ice cream truck in May 1964, where they were picked up by Klansmen masquerading as police, and driven deep into a forest, severely beaten and tied to a car engine.

Then, taken by a small boat to the middle of a river, they were dumped while still alive, dragged down to the river bottom by the weight of their engine-anchor. FBI documents from the time show that Searle and his accomplices were arrested and all confessed, but were released.

But the contemporary legacy of the KKK is still palpable even now.

In Louisiana, as recently as October 2012 a 20-year-old black woman was doused in petrol and set alight by three men wearing white hoods.

Police officers found the initials 'KKK' smeared on her car in her blood, a reminder that even in these apparently more evolved times, Klan activity remains a grotesque reality in parts of the American south.

It didn't help the poor lady burnt so viciously in Louisiana knowing that her president, leader of the most powerful military power on earth, is a black man, and this kind of racist horror is allowed to continue during his term in office.



A 150-TON BOAT FLUNG like a RAG DOLL.

In the aftermath of the 2011 Tsunami, another horror presented itself to the people of Japan.

The 40 metre high wall of water had damaged three nuclear power stations, compromising their safety protocols.

The worst hit was the Fukushima Daiichi power station, which suffered a string of equipment failures and leaks of radioactive materials, making it the largest nuclear disaster since Chernobyl.

The problem was caused by the low-lying generators in the plant flooding and failing, cutting power to the coolant systems.

The reactors drastically overheated, creating numerous meltdowns.

Disaster could have been averted by immediately flooding the reactors with seawater; the decision to finally go ahead was delayed because of anxiety that the water would damage the complex, combustible, and immensely expensive reactors.

A series of hydrogen explosions followed; the water that had flooded the power station returned to the sea, but was now highly radioactive.

A core group of workers stayed behind at the plant to battle the disaster, with most volunteers being the older men – they already had children, and it was known that light doses of the radiation can render men infertile.

Called the Fukushima Fifty, the group was actually around 200 strong, and worked in shifts to restart the cooling systems.

Most received significant radiation doses, and the final effects of the total spread of contamination are still unknown.

As the Fukushima Fifty demonstrated, natural catastrophes can inspire some of the more admirable impulses in humanity.

Compassionate aid poured into Japan in the wake of the Tsunami, and some of those who donated were in no position to do so.

For example the city of Kandahar in Afghanistan donated $50,000 to the relief fund.

Bangladesh sent a search and rescue team, provided medical supplies, 2,000 blankets, 500 rubber boots and 1,000 rubber gloves.

Kuwait was one of the largest donors, sending $550,000,000 in oil and other aid.

Alongside stories of global goodwill and vast donations of money, fuel and support, there were extraordinary tales of survival.

An example was a four-month-old baby girl who was swept out of her parents' arms as they fled the wall of water that was shattering their village of Ishinomaki.

She was found completely unharmed amongst the rubble three days later.

Her story provided inspiration in the midst of the grim realities of the rescue operation.

As the etymology of the word Tsunami implies, Japan has been the epicentre of these disasters for centuries, due to its proximity to the Pacific and Philippines tectonic plates.

A tsunami in 1896 killed 22,000 people in the Aneyoshi province, and in 1933 another struck, killing thousands and leaving only four survivors.

Afterwards the people of the area erected stone tablets, warning future inhabitants not to live below the level indicated, as it lay within the danger of tsunami; the markings saved a village in 2004, that had moved itself higher, and into safety.

In ancient Japanese folklore an animistic explanation emerged that told that the earthquakes were caused by Namazu, a giant catfish who lived in the mud under the sea.

The fish was guarded by the god Kashima who ensured that Namazu behaved.

When his diligence slipped, Namazu was free to thrash about in the water, thumping the seabed with his tail and causing violent earthquakes.

This story is believed to be the origin of the tradition that catfish can sense small tremors that happen before earthquakes, causing them to swim more frenetically.

Indeed, animals have long had an association with being able to foretell earthquakes.

Prior to the Indian earthquake of 2004 many residents recorded bizarre animal behaviour. Dogs refused to go outdoors, flamingos and bats abandoned their homes, and elephants screamed in panic stampeding to higher ground.

In one national park in Sri Lanka forty people perished in the engulfing waters, but only two buffalo died; the animals had a sense of the impending disaster and were able to rush to the surrounding hillsides.

The legacy of the tsunami is still felt in Japan today, with 100,000 still in temporary housing, and saltwater flooding leaving 58,000 acres of farmland and rice paddies unusable.

Clean-up teams have gathered up 22 million tons of debris, returning most of the area to a manageable state, slowly rebuilding the devastated towns and villages.

Disasters of both the natural and manmade kind are often reduced to a grisly sum of their numerical values; death toll, cost, ranking.

Be it a school mass-shooting, genocide or the tsunamis of 2004 and 2011, the human mind has limitations when it comes to comprehending events with such overwhelming magnitude.

Turning to numbers seems to be the only way we evaluate them.



What to WEAR HUNTING BEAR in 19th CENTURY SIBERIA.

Even if you were a large Siberian bear, bumping into a gentleman wearing one of these human blowfish outfits would be a little startling.

It is made up of an iron helmet with leather trousers and jacket, studded all over with 1 inch iron nails, about ¾ inches apart. The nails are embedded into the suit with more iron and leather, making the whole apparatus cumbersome for traipsing around the Siberian woods, chasing, or being chased by, a bear.

Given the Siberian bears' ferocious reputation for savagery, a total head-and-body length of up to 2.8 metres, and weighing in at around 600kg, humans are no match for them; worse, the bears can run more than 60km an hour, twice as fast as an average man.

Unlike most animals, they have absolutely no fear of man, and will attack whenever they feel like it. Siberian bears also tend to be much bolder around humans than their shyer cousins and will regularly destroy huts and stores where food is kept, even with numbers of men around.

So the gruesome nail uniform became a useful bit of armour – it could do as much damage to the bear as the bear to the hunter, and even big bears sensed quickly that here was an opponent to be avoided.

One of the most unpleasant ways to be killed is by a descendent of the brown bear – the Sloth bear; in India they are more feared than tigers or snakes.

Distinguishable by their lankier builds, shaggy black fur, a photogenic white patch on the chest, big lips and floppy ears, it is their extremely long razor-sharp white claws which are particularly terrifying.

Sloth bears maul to bits one person a week in India, often attacking without provocation. They seem to truly dislike humans, and being very short-sighted, this makes them easily taken by surprise.

The bear's trademark attack is to use its teeth and claws to rip the victim's face off.

Those who survive are maimed and badly scarred for life, often left without eyes, nose, or lips.

Sloth bears' dislike for mankind is perhaps due to having rings put through their nostrils and forced to dance, as entertainment since the 13th century.

Bought by handlers as cubs, the bears' teeth were knocked out at a young age to stop them from injuring their owners; they were attached to a four foot leash through nose rings, and were often blind through malnutrition.

This practice continued until it was banned in 1972, giving Sloth bears much revenge to inflict.

There are always tourist guides to be found, advising you on the correct steps to follow if you are foolhardy enough to like 'extreme' holidaying.

Here are some tips, which I can assure you I will never require:

"If you are walking through bear territory and you cannot see 50 to 100 feet in front of you make lots of noise, sing, talk loudly, wear 'bear bells', make yourself known. In most cases the bear will move off as they rarely seek confrontation."

"If you see a bear, talk to him and wave your arms high above you so you seem like a much larger and more ferocious animal than you actually are. Then back away slowly."

"If a bear comes for you, climb a tree or drop into a foetal position until the bear gets bored and leaves you be.



The Destroyer takes on Victor.

N.B. This only works with Brown Bears as Black Bears are far more confident in the trees than on the ground and will not leave you alone even if you are playing dead. Make sure you know your brown bear from your black bear as annoyingly, some brown bears can be black and vice versa."

As you can see, not a reassuring list to accompany on your woodland stroll.

During Victorian times in Canada, Brown bears were commonly starved and goaded to compete in gory wrestling matches, but as people grew more sensitive to animal cruelty, the sport thankfully faded.

However, in the 1970s acclaimed wrestler Tuffy Truesdell challenged people to climb into the ring and take on his bear Victor.

The bear had about 50,000 different opponents in his career, all testosterone-fuelled men keen to impress with this show of bravado. All were reduced to mush by Victor, with fights stopped quickly before he really hurt anything much more than each opponent's pride.

Victor had an unbeatable record across any sport, 50,000 – 0, on his retirement.



A $70 MILLION CAR CRASH.

This is a painting by Andy Warhol.

The image of mangled limbs and torn metal is repeated across the canvas, in a stark expression of the deadening effect of newspaper reproductions depicting the daily tragedies of modern existence.

A similar work in green, part of Warhol's 'Death and Disaster' series created between 1962 and 1964, was sold at auction by Christie's for the then recordbreaking $71.7 million in 2007.

Current sales figures make Warhol the third best-selling contemporary artist in the world, behind Francis Bacon and Gerhard Richter.

However, sales at auction of individual artworks can outstrip those fetched by any of the top three overall sellers.

In 2012 Sotheby's sold Edvard Munch's *The Scream* (1893) for $119.9 million.

Picasso's *Nude, Green Leaves and Bust* (1932) went for $106.4 million in 2010.

But the prize for the most valuable painting yet sold is *The Card Players* (1894) by Paul Cézanne, which in 2011 went for $254 million to the Royal Family of Qatar.

The most expensive actual car crash in history took place in Yamaguchi, Japan in 2011.

A number of car enthusiasts had gathered to drive from Kyushu to Hiroshima; one driver lost control, causing a remarkable pile-up.

No one was fatally injured, but the sight of 14 of the world's most expensive cars utterly wrecked would have driven many men to weep; the crash claimed at least 8 top-of-the-range Ferraris.

A police officer who responded to the emergency call calmly deemed it “a gathering of narcissists”.

A car crash that attained almost mythological status is the one that killed blonde Hollywood icon Jayne Mansfield.

She was killed instantly when the car in which she was driving ploughed into the back of a truck, straight underneath its trailer, tearing the roof off the Buick.

The press widely reported that she had been decapitated, a fact seemingly confirmed by photographs of the crash showing her familiar peroxide blonde hair mangled in the front windscreen.

In reality, she died of head trauma rather than decapitation, but the beheading myth resurfaced spectacularly in the novel *Crash*, by J.G. Ballard.

Ballard was fascinated by the symbolism of automobiles, which he regarded as standing at the pinnacle of twentieth century culture.

He was also struck by the number of famous people killed in cars, including James Dean, Albert Camus, John F. Kennedy, besides Jayne Mansfield.

Ballard said of his creation, “I have used the car not only as a sexual image, but as a total metaphor for man’s life in today’s society”.



Detail from Andy Warhol Car Crash painting 1963.



Andy Warhol Car Crash 1963.

Crash was later made into an award-winning film by director David Cronenberg in 1996, and faithfully translated its narrative chronicling the lives of people in Los Angeles who get erotic excitement from viewing car crashes.

A central character fantasises about staging a Jayne Mansfield-style of death, and eventually kills himself in the act.

In 1970, prior to writing *Crash*, Ballard had organized an exhibition of smashed cars at the New Art Laboratory in London.

These were displayed to demonstrate his concept of the unique collision between man and his technology.

At the opening party a topless woman circulated, interviewing guests alongside her video cameraman, the film aired live on monitor screens around the room.

The party quickly descended into chaos, with the cars and model both attacked.

Throughout the exhibition gallery visitors continued to deface the crashed cars; some went as far as to urinate or masturbate on them.

Ballard claimed that the violent and sometimes sexual response seemed to bear out his theory; the modern world’s embrace of a technological landscape would forever affect human social relations.

Personally, I found both the book and the film simply dull.

But for me, Warhol is one of the most significant artists of all time.



A TRAINEE BODYGUARD in CHINA gets a BOTTLE S M A S H E D ACROSS her HEAD.

She is one of twenty female recruits, mostly university graduates, who are expected to stand unflinchingly as a bottle is broken to shards on their heads. Each trainee endures ten months of instruction to develop skills in reconnaissance, martial arts, as well as business etiquette.

Private bodyguards have become increasingly in demand in Beijing as the Chinese economy has accelerated with over 1 million millionaires and 300 billionaires, and it is now a highly lucrative career choice for women.

Wealthy businessmen prefer them as they are less conspicuous than male bodyguards, and can adopt different roles.

There are also many financially powerful women in China, who prefer a female bodyguard, finding their presence less compromising.

Alongside the ever expanding role of traditional security guards – in stores, banks, corporate headquarters – is the fastest growing security sector, the private military organisation, offering well-armed troops.

Once known as mercenaries, this term is now prohibited by the sleek new organisations who work for governments in 50 countries.

Even back in 2008, private contractors made up 30% of the workforce in the U.S. Intelligence community and cost the equivalent of 50% of personnel budgets. Corporate warriors are hired to guard sensitive locations, such as oil refineries in war zones, or protect the companies engaged in reconstructive efforts post a conflict, like General Electric.

Some contractors help train local militaries fight more effectively, to create professional peacekeeper troops.

Politically, it is often more helpful for America to employ companies to support danger zones, rather than to commit conventional U.S. forces.

So as they withdrew troops from Iraq, 10,000 private security operatives were hired to protect five fortified compounds within the country. They search for roadside bombs planted by militants, fly reconnaissance drones, and provide quick-reaction forces to aid civilians caught up in eruptions of civil unrest.

In America, the AirScan Corporation offers airborne security for the U.S. Department of Defence, U.S. Air Force, NASA, the U.S. Department of the Interior, as well as oil companies in Columbia and Angola.

Blackwater Inc. is probably the organisation most familiar to Pentagon watchers, though in the UK at least ten major specialist security firms are involved in counter terrorism using armed personnel; operating from London, they provide a global service.

In this rapidly expanding area of business, leading firms are based in Japan, France, Russia, South Africa, Switzerland, South Korea and a dozen other nations around the world.

Security giant G4S is the second-largest private employer on Earth and with 625,000 staff it ranks just behind Walmart. While some of its business is focused on routine bank, prison and airport safekeeping, G4S also plays a significant role in crisis-zones around the world.

In 2008 G4S swallowed up Armorgroup, whose 9,000-strong army of guards has protected about one third of all non-military supply convoys in Iraq. Armorgroup was notorious for having Afghan warlords on its payroll. The combined group now has a presence in more than 125 countries, including some of the most dangerous parts of Africa and Latin America, where it offers government agencies and private companies high level armed security

Of course, the privatisation of war presents a vacuum in the legal position of private soldiers deployed in armed conflict – are they combatants or civilians, in law? Often, a military special forces officer will be hired to head and train a private army, as was the case with an ex Royal Navy pilot who headed a twenty-five strong force of specially recruited Pakistani soldiers to raid Taliban camps and hunt Al Qaeda militants.

It was a U.S. State Department initiative to operate the secret programme in the tribal badlands bordering Afghanistan. He was granted use of a fleet of seven U.S. helicopters and two fighter jets.

As the private army grew, he recruited local Pathan soldiers alongside American mechanics. It scaled up to become a multimillion dollar American and British training programme.

If you are thinking of a career in executive security, don't expect your days to be full of exciting high speed car chases, rugby-tackling evil villains, and leaping in front of clients to take a bullet; mainly your role is more or less pure admin: creating an organisation that tries to ensure there are no bullets flying around in the first place.

Personal security is particularly profitable; you will charge clients a minimum of £100,000 per year for a single bodyguard, tripling to £300,000 for round the clock shift-work protection.

Italy enjoys the highest ranking per capita for bodyguards, not entirely surprising in a country where kidnappings were identified by then PM Gordon Brown as "practically a national pastime".

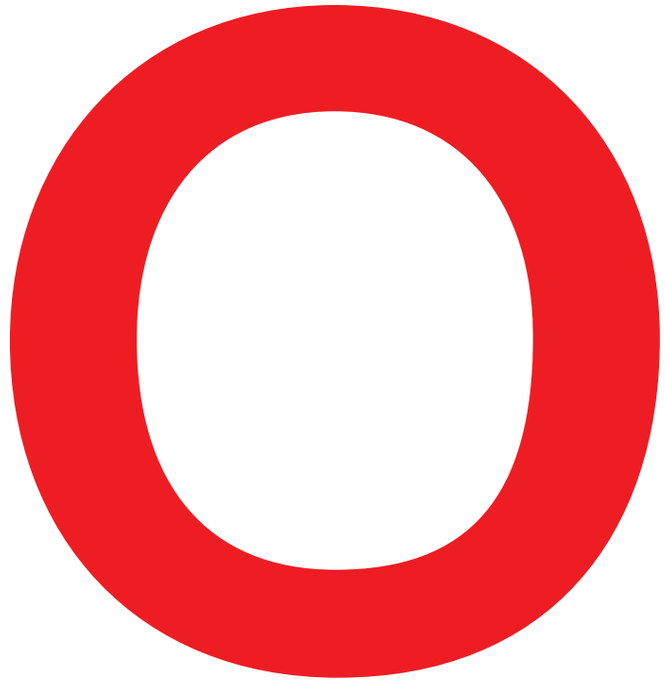
In the UK, even Norland nannies are now being trained as bodyguards.

At Norland College in Bath specialist young graduates are regarded as the elite of the babysitting world, sought out by world royalty, government heads, celebrities, and the supremely wealthy.

Measures were put in place to give the nanny training programme, first established in 1892, a 21st century overhaul. Now students can be taught by leading bodyguard trainers to master Tae Kwon Do, and fast driving on a skid pan; they can defend their young clients, speed away from potential danger, alongside their traditional nannying skills.

Next time you see a woman in the familiar Norland taupe dress, with a nurses watch pinned to her chest, and a brown felt hat on her head, don't let her unassuming presence confuse you.

More and more private security companies are including Norland trained 'Nannyguards' on their books to meet the growing demand.



OUT for the COUNT.

Count Ferdinand von Zeppelin designed his rigid airship over a twenty-five-year period between 1874 and 1899, when he finally received his patent.

The heyday of the Zeppelin as a passenger vehicle followed its use as a bomber by the German air force in World War I.

By the 1930s regular flights of the dirigible carried passengers between Germany and North America.

William Randolph Hearst, the U.S. newspaper magnate, sponsored a flight to circumnavigate the globe, taking 21 days to travel 31,000 miles.

After the establishment of the Third Reich in Germany, the Zeppelin was overshadowed when German Air Minister Hermann Goering chose to focus on fighter planes and faster bombers for his air fleet.

But flying on board a Zeppelin was very popular with travellers; the *Hindenburg*, named after the former German President, was the largest airship ever built and made its maiden flight in March 1936.

Hindenburg's 'A Deck' contained the ship's Dining Room, Lounge, Writing Room, Port and Starboard Promenades, and 25 double-berth inside cabins.

On either side of the deck were promenades, featuring large windows which could be opened wide in flight.

The Dining Room occupied the entire length of the port side, and was decorated with paintings on silk wallpaper by Professor Otto Arpke, depicting scenes from Graf Zeppelin's flights to South America.

During the 1936 season the Lounge contained a 356-pound Blüthner baby grand piano, made of Duralumin and covered with yellow pigskin.



However, in the new political environment there was a military embargo on helium to inflate the giant.

Supplies were short, and the *Hindenburg* required a great deal.

In what was clearly a fatal decision the *Hindenburg* was filled with flammable hydrogen.

While landing at Lakehurst, New Jersey after a transatlantic flight, in front of thousands of spectators, the tail of the ship caught fire.

Within 40 seconds the flames spread over the outer skin to engulf the entire ship.

Miraculously, over half the passengers survived.

The American navy built their own blimp, *Los Angeles*, and it was hoped that airships would to be able to dock at the top of the Empire State Building, which had increased its height by 200ft.

The scheme would enable passengers to land and embark from midtown Manhattan rather than New Jersey.

The building's developers claimed that passengers could emerge and be on the street in seven minutes.

But it transpired that the notion of an airport-style ramp carrying anybody from a hovering, tethered dirigible, even in excellent conditions, was far-fetched.

Most people concluded that the owners had in fact raised the Empire State an extra 200ft as a ruse to be able to offer potential tenants a floor of offices in the world's tallest building.

The Zeppelin brand was resurrected in 1968 by an English rock band that chose the name Led Zeppelin, apparently after Keith Moon, drummer of The Who, told guitarist Jimmy Page that his idea to create a new group would crash like a 'lead zeppelin'.

Frau Eva von Zeppelin, heir to the Count, tried to sue the group for using the family name, but the case was eventually dismissed.



WIN a DATE with a RAPIST SERIAL KILLER.

The hit U.S. show The Dating Game offered bachelors the chance to compete for the affections of potential girlfriends.

Introducing Rodney Alcala on the show in 1978, the host described him as “a successful photographer, and between takes you might find him skydiving or motorcycling”. Alcala won.

The producers of the show were clearly unaware that their winner was a convicted rapist and registered sex offender.

In fact he had already killed at least two women in California and two others in New York.

Alcala committed his first known crime in 1968.

He was spotted luring an eight year old girl into his apartment, and his suspicious manner alerted a passerby to call the police. The girl was found raped and beaten with a steel bar, but Alcala was nowhere to be found.

He had fled to New York, changed his name to John Berger, and obtained a job as a counsellor at a New Hampshire arts centre for children.

Someone spotted his face on an FBI wanted poster at a post office, and he was arrested and extradited back to California.

His first victim’s parents had relocated their entire family to Mexico, and refused to let their daughter re-live her nightmare by testifying in court.

Prosecutors were forced to allow Alcala to plead guilty to the lesser charge of assault. He was paroled after 34 months in 1974, and within weeks he had violently attacked a 13-year-old girl who had accepted what she thought was a ride to school.



A more recent photograph of Alcala.

He was again paroled after two years, and set himself up as a professional photographer, convincing hundreds of young women that he wanted to photograph them for his ‘portfolio’. Most of the hundreds of models were naked and many were sexually explicit.

In June 1979 a 12-year-old girl from Huntington Beach, California disappeared on her way to her ballet class. Her decomposing body was found 10 days later in the Los Angeles foothills. Police subsequently found the girl’s earrings in a Seattle locker owned by Alcala.

In 1980, he was tried, convicted and sentenced to death for the murder, but the verdict was overturned by the California Supreme Court because the jury had been improperly informed of his prior sex crimes.

After a second trial, virtually identical to the first except for the omission of his prior criminal record, he was convicted once again and sentenced to death. An appeals court nullified the second conviction, because a witness was not allowed to support Alcala’s contention that a park ranger had been ‘hypnotized’ by police investigators.

While preparing their third prosecution, it was discovered that Alcala’s DNA matched some left at the rape-murder scene of two women in Los Angeles. Another pair of earrings in Alcala’s locker matched the DNA of one of the victims.

Additional evidence led to Alcala’s indictment for the murder of a further four women, their bodies found posed in carefully chosen positions for photography.

Alcala elected to act as his own attorney in the trial, took the stand for five hours playing the role of both interrogator and witness, addressing himself as ‘Mr Alcala’ in a deeper than normal voice, and then answering in his normal voice.

A surprise witness was Alcala’s first young victim, who had decided to come to the court from Mexico to give testimony.

Alcala is now serving his life sentence.

In March 2010 police released 120 of Alcala’s photos and sought the public’s help in identifying them, in the hope of tracing other murder victims.

Detectives described him as a ‘killing machine’ and estimated he could have murdered anywhere between fifty and a hundred women.

On The Dating Game Alcala won a date with beauty queen Cheryl Bradshaw, who subsequently said she found him ‘creepy’ and refused to go out with him.

It is the only pleasant news in this unpleasant tale.



FRESH AIR is IMPORTANT for BABIES.

In the 1930s, families with young children living in the new high-rise tower blocks in London's East End were confronted with the dilemma of not having an outside area in which babies could bask in sunshine and fresh air.

East Poplar Borough Council's proposed solution was to fix wire cages to the outside of tenement windows, maximising space potential in confined rooms and allowing baby to reap all the benefits of the English elements.

The 'Portable Baby Cage' patented by Emma Read of Washington USA in 1923, aimed to combat ventilation issues in crowded cities; unfortunately its brand name failed to conjure up pleasant notions of children's liberty.

Comprising of wire sides, slanted metal roof and sturdy supports, you could guarantee your baby would be outdoors but safe from rain.

The contraption not only served to provide fresh air but doubled up as a play area and napping zone, with curtains that could be drawn to prevent the inevitable top storey chill whilst sleeping.

Read's patent proposal runs into such depth that the vertiginous cage could be developed to include multiple levels and compartments, so that "when the baby is sleeping they may be lowered, and arranged so as to prevent draft and permit the baby to receive sufficient fresh air" – much like a contemporary hamster cage.

The devices were also supplied to members of the Chelsea Baby Club who lived in high buildings and had no gardens.

In the interwar years people were becoming more health conscious and new government incentives were put into place to promote the welfare and wellbeing of citizens, particularly in working class areas of London where overcrowding was common in slum conditions, and with a high rate of infant mortality.

Sadly, London air of the early 20th century could not be defined as ‘fresh’; heavy fogs polluted the capital, culminating in the great smog of 1952, causing the premature death of about 4,000 people.

The worst affected area of the capital was the East End, which had the highest density of factory smokestacks and domestic chimney pots.

The low-lying geography of the area encouraged the grimy sootiness of the fogs to settle, but Londoners tolerated the unpleasant effects of the smog as the inevitable cost of the city’s economic growth.

Many of those who died suffered from lung-related illnesses, but many also perished because of low levels of visibility; people could not see further than a few feet in front of them, so road accidents were commonplace, as was the incidence of drownings when people accidentally fell into the Thames.

Dr Spock, (no, not Mr Spock of *Star Trek*, if you’re too young to know much) was an American paediatrician whose book – *Baby and Child Care* – revolutionised child rearing.

Its message to mothers was ‘you know more than you think you do’, a controversial departure from accepted parental methods when first published in 1946.

Previously, new mothers were encouraged to rely on their doctors for advice rather than on their instincts. Spock promoted parenting that embraced displays of love and much doting contact with babies. His ideas about childcare influenced several generations of parents to be more flexible and affectionate with their children, and to treat them as individuals.

Throughout its first 52 years, Dr Spock’s book was the second best selling book next to the Bible.

In 1962, Miami paediatrician Dr Walter Sackett published his contradictory theory, *Bringing up Babies*, opposing Spock’s nurturing techniques, instead advising that parents who failed to impose strict schedules on their babies were turning children into future tyrants.

Sackett claimed that if parents encouraged babies to expect everything to be provided on demand, and smothered them with constant love and affection, they must admit the possibility that they were “sowing the seeds of socialism, creating a generation that was State dependent”.

Of course parental methods of the 20th century have had to be re-examined in recent times due to the changing nature of the traditional family.

A contemporary experiment in childcare comes from the Stocker family in Canada, who have decided to raise their child Storm as genderless, revealing Storm’s true identity to no one outside the immediate family of Mum, Dad and two elder sons. According to Storm’s parents, paying tribute to freedom and choice in place of limitation, their child will live out the first of his or her years as gender neutral, free of gender stereotypes.

Psychologists and paediatricians have been outraged at the decision, stating that the child cannot develop a sense of personal identity, and sets them up for bullying, and blocking a normal sense of who they are.

The Stockers are not alone in their choice of gender freedom for Storm. A preschool in Stockholm has prohibited the use of gender specific words such as she or he, referring to all children as ‘friend’.

This approach is said to widen a child’s view of the world, instead of imposing limits and boundaries onto it, and to allow them to visualise all possibilities for themselves.



On breaking down the walls of gender, a near impossible trend has arisen in parenting, lead by a group of fathers who have been dubbed the ‘Milk Men’.

It appears that men have mammary tissue and milk ducts just like women, and, if stimulated enough, they can actually produce breast milk.

All it takes to get started is the willpower and diligence to get the milk flowing; hyperactive hormones, perhaps with chemical assistance, and a few minutes spent with a breast pump help trigger the milk making potential.

Unfortunate circumstances may demand paternal breast feeding as the only natural-milk option, as a Sri Lankan father discovered in 2002. After his wife passed away in childbirth, he discovered that he was able to suckle his two infant daughters.

The men of the Aka Pygmy People of Central Africa have been dubbed ‘the Best Dads in the World’ due to their unusual relationship with their children.

The Aka, with a population of around 20,000, share all responsibilities that have been typically gendered in the rest of the world; women commonly hunt whilst men stay with the children, happily suckling them. To the Aka the idea of a crib or a cot is absurd; they would never leave a child unattended and spend most of their time within direct reach of their offspring, promoting physical closeness.

At the other extreme, all around the world children are exploited as combatants in armed warfare, trained to expertly use their AK-47 assault rifles. Although most child soldiers are between 14 and 17 years old, significant recruitment starts at the age of 10 or even younger.

Approximately 250,000 children under the age of 16 are thought to be fighting in conflicts around the world. Easily manipulated, children are sometimes coerced to commit horrific atrocities, regularly forced to injure or kill members of their own families or other youngsters.

While child soldiers are now more commonly associated with Third World conflicts, they were in fact the norm in Western battles dating back to the Spartans of Ancient Greece.

They built a society heavily ingrained with military ideologies and practices. Boys as young as seven were taken from home to be brought up with military training. The Spartans raised warriors as a way to ensure their supremacy against Greek rivals, and young fighters were the key to survival for a small city-state.

In today’s world, minor nations’ child soldiers are frequently employed for the very same reason.

There is seldom a problem in recruiting (or kidnapping) children into the armed forces. With adult males often on the front line, youths are counted on to act as troops to protect the home city. Smaller children who are unable to wield heavy weaponry are used as scouts and spies.

Even as an admirer of the magnificence of the Roman Empire, it’s hard to overlook the many dark clouds that occurred during its early days under the law and principle of ‘patria potestas’ (the power of the father); the male head of the household held absolute power over his children. He could discipline them as he wished, or even kill them or sell them into slavery.

I think we would have been more content, growing up in a cage, suspended outside a window, ten floors up.



After the BOMBS FELL on DRESDEN.

Dresden was a city once described as Florence on the Elbe.

Nestled in the heart of Saxony, it was a beautiful highlight on the Grand Tour, the seat of culture for the region and indeed Germany.

Post-war however, it is synonymous with the most destructive bombing raid to have ever taken place on European soil.

This was intensely controversial due to the widespread devastation created, but the distinct lack of importance it had as a military target.

The bombing raid was conducted by over 1,300 UK and U.S. bombers, which collectively dropped 3,900 tons of high explosives on the city, destroying 15 square miles of homes, schools, churches, shops and businesses, and killing about 25,000 people.

The deathly rain of bombs took place towards the final weeks of the war, with the German army already severely weakened and the Russians pressing into their country.

It is argued by military historians that Dresden's destruction represented a tactical imperative by Allied forces to deter Russia from presuming international supremacy in the wake of their military achievements.

Even those who describe Dresden's catastrophe as a war crime accept that leaving Russia to simply claim the whole of Europe as its war spoils would have been disastrous.

Horrific reports told by Dresden survivors describe the grim sight of people dropping to the ground unscathed by fire, but starved of oxygen by the greedy flames that engulfed the city.

There were few bomb shelters for people to hurry to, with inhabitants using their cellars instead, only for families trapped under debris fighting to break out, and escape.

However, the fires were so widespread that people fleeing simply ran into more flames. In the aftermath hundreds of bodies were found clumped at the end of each residential block.

The horrors of the bombings became a grisly core source for one eyewitness – Kurt Vonnegut. His based his novel *Slaughterhouse Five* on his experiences as a prisoner of war in Dresden at the time.

POWs were used to gather bodies for mass burial in the aftermath of the attack, and Vonnegut vividly describes piles of corpses, too numerous to be buried, being torched by German troops with flamethrowers.

Some view Dresden as a retaliatory moment for the British, who had suffered so much during the Blitz.

In reality however it was Hitler's decision early in the war to break the spirit of Britain by terror bombing the citizens of London, rather than concentrate on airbases, that actually saved the UK from invasion.

RAF bases and a few naval ports had taken hits from the German Luftwaffe, but a focused ongoing attack on them would have left the UK too weak to deter an invasion by sea.

Blitzing London gave the RAF enough time to reorganise and build more planes, leading to the victory in the skies at the Battle of Britain, forcing Hitler to abandon his plans for invasion.

The destructive power of the bombers that sailed over Dresden is little compared to the largest manmade explosion ever – the Tsar Bomb. Its detonation created a mushroom cloud over 64km high, with its shockwaves still evident even after their third passage around the earth.

The Tsar Hydrogen bomb was developed by the Soviet Union and tested in 1961. It yielded an unimaginable 57 megatons of energy – but was originally intended to deliver 100. The extra force to be deployed was abandoned as nobody could determine the range of fallout from such a device.

The detonation took place on the remote Zemlya islands north of Russia – but still managed to utterly destroy villages over 55km from the site, and even damaged parts of Norway and Finland, thousands of miles away.

The proof that such weapons existed made the potential for wholesale global destruction close at hand, and a generation were brought up fearing nuclear annihilation was imminent during the Cold War. Adding to the fear were a number of near-misses with nuclear weapons. In 1956 a bomber crash-landed at an airfield in Suffolk and hurtled into a nuclear weapons storage bunker, killings its crew and spreading burning fuel over three Mk6 atomic bombs.

If the fire had not been so rapidly contained, the resulting explosion would have spread radioactive material over the entire of the East of England.

Global nuclear war was also very narrowly avoided in 1983, through the foresight and calm reasoning of Lieutenant Colonel Stanislav Petrov, who was on duty at a bunker in Belarus.

His computers alerted him to the launch of five nuclear missiles from the American Midwest.

A nuclear exchange that could engulf the entire world loomed, but Petrov kept his head and delayed passing news of the strike to his seniors; he knew that computer errors were possible, and that had the U.S. launched such an attack, it was unlikely to be only five missiles strong.

Thankfully he was correct; the computers had mistaken reflected heat from the sun for missile exhaust gases.

But with Iran threatening to be the world's newest superpower alongside North Korea, it seems that the invention we'd all prefer to un-invent will continually remain a threat to the lives of millions.

BETTER to KILL YOURSELF, than be GANG-RAPED and MURDERED.

I always felt Attila The Hun set the clearest path for himself, what would today be called his ‘mission statement’. “Happiness lies in conquering one’s enemies, in driving them in front of oneself, in taking their property, in savouring their despair, in outraging their wives and daughters.”

Not for nothing do they say: To the victor the spoils. This was certainly the case for the Russian army at the end of World War II.

What choice is more terrible than to face gang rape, followed by the possibility of being murdered, maimed, crippled for life – or suicide?

This is the decision that millions of German women faced at the close of World War II – a conflict that provided some of the darkest moments in human history.

Time and time again the War proved that line between man and beast was shown to be inestimably thin, mass murder and torture being commonplace.

What has only recently emerged from the murk of history is the extent of horrific revenge perpetrated by Red Army soldiers

sweeping through Eastern Germany and into Berlin during their victory in 1945.

It is estimated that during this march over two million women across the region were violently raped, with many suffering multiple attacks, and left for dead.

Suppressed as taboo for decades, and the widespread lack of sympathy for Nazi-loving Berliners, the stories of the women who were brutalized during this time have only just come to light. The revelations were prompted by the publication of the diary of a young Berliner who survived, and research into Russian archives by historian Antony Beevor.

As a female in Germany, whether you were aged 10 or 80, during the dying days of the war, nothing could save you as the Red Army triumphantly liberated Europe.

Berlin itself in 1945 was one of the most devastating environments to survive in. The city was gripped by a harsh winter, food and fuel shortages; 600,000 homes had been destroyed, only 2.8 million of the 4.3 million strong population remained, with one million of these effectively homeless.

Life for Berlin's women was reduced to bare survival; hospital estimates put the number of women violently raped in Berlin in the first month at the time around 95,000 to 100,000.

Evening and nights became the 'hunting hours' or no-go times for moving around the city as the occupying forces were more likely to be drunk, with soldiers consuming a good deal of alcohol, creating lethal cocktails with chemicals seized from laboratories and workshops, emboldening them to actions they might not otherwise have undertaken.

One of the many reports tells of a gang of soldiers raping a Jewish woman. Germans present tried to communicate with the Russians that she had been persecuted by the Nazis, only to be told – "Frau ist Frau".

Some women attempted to form relationships with soldiers in the hope that they might provide protection.



Many women were forced to tread a murky line between rape and prostitution. Women also turned on one another, with mothers giving up the hiding places of other women's daughters in order to save their own.

Taking your own life was the only option for many, disgraced by the rapes they had had to endure, or attempting to escape from the violence that would surely be meted to them.

Suicide levels in Germany were very high during the period: one of the most famous examples was the discovery of the bodies of the Leipzig burghermaster's family, captured on camera by Lee Miller.

The suicide of high ranking officials was not uncommon, and was positively encouraged in Nazi ideology; allegedly at the Berlin Philharmonic's last performance the audience willingly accepted cyanide pills.

There were 3,881 recorded suicides in Berlin in April alone in 1945. In the city of Demmin, which the Red Army had routed, women who had been raped and shamed, and others unable to bear the invasion and its atrocities, committed mass suicide.

Whole families would slash their wrists, hang themselves, or loaded with stones walk into the Peene River. The event was so horrific there were even accounts of Russian soldiers pulling people out of the water, bandaging wrists and cutting down those attempting to hang themselves. Over 1,000 died. These memories were quietly suppressed in Germany, and when one bold woman who remains anonymous published her diary entitled *A Woman in Berlin* in 1954 it only prompted reactions of disgust.

The book rapidly went out of print and was only re-published 50 years later. In it she baldly describes gang rapes and her struggle to survive, recalling how women kept quiet to ensure their own men would touch them again.

Sexual abuse has accompanied military successes for centuries, with soldiers considering the bodies of women as suitable reward for long months and years of fighting.

Many saw the ill-treatment of Germans as fitting, given that around 30 million Russians are estimated to have died as a result of Operation Barbarossa, the German invasion of Russia in 1941. This figure includes 3 million deliberately starved in POW camps.

Indeed, Stalin was recorded as saying, “Can’t people understand it if a soldier who has crossed thousands of kilometres through blood and fire and death has fun with a woman or takes some trifle?”

But Russian troops did not just target German women as having been the wives, mothers and daughters of the invading force that had killed and destroyed so much of Russia, but they also ravaged Polish, Ukrainian and Belorussian women who had been interned in concentration camps by the Germans and used for slave labour.

Within a couple of days of the occupation the soldiers were flashing torches in the faces of groups of women that they had rounded up, showing that they were selecting pretty faces as spoils of war rather than outlets for their anger and vengeance.

Beevor’s exploration of the reasons for the behaviour of the Red Army suggests that with retribution removed as the main motive, the soldiers were responding to a number of pressures.

Firstly, the violent treatment they endured at the hands of their own officers throughout the long years of service. Secondly, their being sexually starved through the campaign, and indeed in Soviet life in which love and sexuality was repressed through the process of de-individualisation and channeling all feelings towards the love of the Party.

Whatever the explanation, this dark chapter of history is now more widely understood and its victims can take their place amongst the millions whose lives were destroyed in our world’s most shattering war.



DOWN the DRAIN.

As the water gurgled down the drain in his sink, a photographer captured the fleeting image of an eye apparently staring back at him.

When you were a child didn't you find it mesmerising watching bath water swirl down the plughole?

And did you, like me, heartlessly turn the taps upon any poor spider who had crawled all the way up into your bath, only to be water-cannoned back down again?

In a block of North London flats in 1983, drain cleaning company Dyno-Rod were having a particularly difficult time with a stubbornly blocked drain.

As they continued to try and unclog it they discovered that it was packed with discarded old meat. One of these flats belonged to Dennis Nilsen, the notoriously grisly Muswell Hill Murderer.

Struggling to dispose of the bodies of his victims, Nilsen tried flushing them down his lavatory.

When police officers knocked at Nilsen's door and told him that his drains were full of human remains, he replied "Good grief, how awful!"

The officers found him an odd fellow, and as their suspicions grew Nilsen calmly admitted that he had body parts in bin bags inside his wardrobe, in his living room tea chest, and in his bathroom.

Taken aback, the policemen asked how many bodies they were talking about. Nilsen apologised for not knowing the correct number but said "15 or 16, since 1978".

It is, however, not only the murdered who end up in drains.

Tales of the Sewer Alligators have been told in New York City since the 1930s. These reports were believed to have started when wealthy New Yorkers came back from their summer holidays in Florida with baby alligators as pets for their children.

When the gators grew to be too big they were promptly flushed down the toilet, into the sluices. Here the legend states, they were able to live and flourish, creating an underground clan of mutant, urban alligators.

Nobody has spotted one, apparently.

But in August 2005, a snake named Keith was abandoned in a Manchester flat after his owner was evicted for rental debts. Keith, a 10-foot-long boa constrictor, lived in the sewage pipes of the block of flats for three months.

He would occasionally pop up in various toilet bowls on his adventures, undoubtedly startling the residents, who were forced to put heavy bricks on top of their toilet lids to keep him inside.

Eventually one resident was able to trap Keith by coaxing him out, locking the bathroom door, finally able to prove to firemen and police that there was indeed a snake in their toilet – previous anxious calls had been treated with scepticism.

American drain cleaning company Roto-Rooter revealed the wide range of items people have tried to dispose of down their lavatories. They include toothbrushes, false teeth, six-packs of Budweiser, golf balls, action figures, keys, television remotes, vibrators, and engagement rings; these create about 65% of all drain blockage problems.

A recent mania for flushing gripped some of the world's children after the success of the animated film *Finding Nemo*, where the young clownfish hero is separated from his father and captured, to be kept in an aquarium. Clever Nemo manages to escape by hurling himself down the toilet and returning to the sea, and to his father.

In reality, for obvious reasons, a toilet does not lead directly to the sea, as disillusioned children discovered after they 'freed' their goldfish.

Roto-Rooter reported getting many calls from parents seeking help, children crying in the background as they grasped what fate they had inflicted on their pet.

Did you ever go treasure hunting as a child, or perhaps you do still?

The Toshers took this fascination to extremes.

Toshers in Victorian London made their living by scavenging in drains. It was a common sight in 19th century Wapping for an entire family to lift off a manhole cover and go down into the sewers. There are no reports of any great fortunes being made discovering a trove of valuables.

Earlier, in Tudor England a Gong Farmer would be the equivalent of your modern day Dyno-Rod or Roto-Rooter. He had the task of cleaning a privy and its contents, and taking 'gong' outside the city limits where it might be used as fertiliser on fields and gardens. Unpleasant work, I imagine.

One man who wasn't afraid of getting smelly, and enjoyed a nice sewer, was Albert Spaggiari.

The Frenchman started out in petty crime, but soon his attention was drawn to a much more ambitious haul.

When Spaggiari heard that in Nice the sewers ran close to the Société Générale bank's vaults, he was entranced. He decided to break in from below, taking two months to dig a tunnel from sewer to vault, and tested for any bank acoustic detection device by putting a loud alarm clock under the vault.

When the alarm sounded nobody responded, as the vault was thought to be utterly impregnable, with no need for audio security.



Sewer specialist Albert Spaggiari prior to his plastic surgery makeover.

On 16th July 1976, during the loud and busy festivities of Bastille Day, Spaggiari and his team broke into the vault itself. They opened 400 safety deposit boxes and stole an estimated 60 million francs in cash and valuables.

Before leaving the bank, Spaggiari scrawled "sans armes, ni haine, ni violence" on the vault's wall – "without weapons, nor hatred, nor violence".

French police were dumbstruck, but eventually they closed in on Spaggiari thanks to a tip off from an ex-girlfriend of one of the team members, who then named the entire gang in a deal with the prosecutors.

Spaggiari was arrested, but this did not deter him. During case hearings, he devised his escape.

He had created a ficticious document which he claimed was concrete evidence of his innocence. It confused and distracted the judge and prosecution so utterly, that Spaggiari was able to escape by jumping out of the window onto a parked car, and then on to a waiting motorcycle.

Spaggiari remained free for the rest of his life, was thought to have undergone plastic surgery to disguise himself, and rumoured to have fled to Argentina.

He was sentenced in absentia to life in prison. Despite that, he visited France several times to see his family and once even gave an interview for TV show *Apostrophes*.

On 10th June 1989 Spaggiari's mother found the body of her son carefully placed in front of her home by his friends. He had died of throat cancer in a country house in Italy.

Police claimed his remains, but the remains of his plunder was never recovered.



A SHOWER of CONFISCATED LIQUOR, DETROIT 1929 during PROHIBITION.

Hundreds of gallons of whiskey flow from the upper windows of a three-storey building, after a police raid.

During Prohibition in 1920s America, the illegalisation of manufacturing, purchasing and transporting alcohol did wonders for making drinking glamorous, and dangerously alluring.

This effect has been recorded by psychologists as the ‘Romeo and Juliet syndrome’, popular with campaigners against the prohibition of drugs as a strong reason for their legalisation.

Of course detractors claim that such a move would increase the number of people abusing drugs.

The legislation argument is endorsed by Brehm’s theory of reactance – if the individual ever feels that their freedom is being impinged, they will do whatever they can to access whatever is being denied them.

In tests a 2-year-old is shown a toy, and then the same toy behind a Plexiglas sheet.

The inaccessible toy appears far more attractive, and the child will do its upmost to reach it.

From an early age we apparently always want what we can’t have.

In 2010 *The Economist* published a supposedly definitive article backing legalisation of drugs, as the best option available.

Their argument rests on the fact that despite drugs being illegal and stringently policed, over 5% of the world's population take them, 200 million and growing.

The U.S. spends $40 billion annually on trying to eradicate the drug trade, and arrests 1.5m of its citizens each year for drug offences, jailing half a million of them.

Consumer countries are in a healthier state than producer countries, however.

Mexico is currently being torn apart by drug cartels – 800 police and soldiers have been killed since 2006, and over 60,000 civilians.

The argument contends that legalised drugs could be taxed to generate revenue for governments – in fact the British Government was one of the biggest drug dealers in the world





when it started selling opium to the people of China in 1773, despite the Emperor's dictum against it.

Two of the piratical individuals behind this endeavour were William Jardine and James Matheson, who went on to found Jardine, Matheson & Co., the influential investment bank that still exists in Hong Kong today, and is worth $19.4 billion.

Perhaps one of the most legendary alcohol binges in history took place in the UK around 1730.

Gin, the drink of choice was nicknamed 'Mother's Ruin'. The liquor distilled from juniper berries was invented in Holland and popularised in the UK during the reign of William of Orange, the Dutchman who took the throne.

10 million gallons were being produced a year, and prices were driven to rock bottom.

The poorest in society began to drink it like water, resulting in a rapid increase in crime, prostitution, madness, higher death rates and lower birth rates.

One unpleasant account was of Judith Dufour, who in 1734 took her two-year-old son from the workhouse, throttled him and dumped him in a ditch. She then sold his clothes for pennies to buy gin.

William Hogarth documented the horrors of the gin mania, and his prints became a catalyst for legislative action against the production of gin, and made licences to sell it vastly more expensive.

With poor harvests at the time suddenly making food more costly, the gin obsession thankfully expired.

Today, criminal organisations worldwide benefit from the illegal status of drugs, making profits of $320 billion a year.

With the drugs trade unregulated, drug users are also at risk as some products are found to have been cut with substances that are toxic, including rat poison.

The rise of organised crime syndicates providing desirable, but illegal, products to a large customer base is little different to the Prohibition years.

Al Capone was one of the most celebrated of the gangsters that ran the illegal trade in alcohol, and the establishments in which to enjoy his bounty.

It was estimated that at the height of his powers, he had 700 men in his operation, and was making $60 million per year, mostly through selling beer.

1925, in New York City alone, there were anywhere from 30,000 to 100,000 speakeasy clubs, and whilst consumption of alcohol dropped by half in 1920, it actually increased in urban centres.

Crime in general spiralled, with theft, burglaries, homicides, and serious assaults all rising as fast as policing costs.

More alarmingly, a new fascination with drugs appeared, and the birth of a large scale market created.





It’s NOT the MATADOR’S TONGUE. It’s the BULL’S HORN PENETRATING the ROOF of his MOUTH.

Matador Julio Aparicio Díaz stumbled in the Las Ventas bullring in Madrid.

The bull he had been tormenting was moments from being killed with a final thrust of Aparicio’s sword, having already been pierced by several banderillas.

When Aparicio, in his pink-stocking sequined costume, lost his footing on the arena sand the bull seized its chance for revenge; it rammed its horn straight through the matador’s chin, and out through his mouth.

The crowd gasped, then shrieked in horror expecting the bull to tear open the bullfighter’s throat, or even rip off his head. But the beast stepped back and the horn slipped out of the matador’s face cleanly.

The bull was quickly forced away, to be dispatched by other bullfighters; ringside medical staff hurried to staunch the blood pouring from the gaping would, rushing Aparicio to hospital.

He underwent six hours of surgery, with doctors working to reconstruct his throat, his jaw and roof of his mouth.

Recuperating well in the intensive care unit, he returned home, only to return four days later with acute respiratory failure after developing an infection.



Juan José Padilla, 'The Pirate', on his return to the Corrida.

He recovered in a week, and fired his manager; in an interview the manager had stated that Aparicio would not be able to psychologically recover.

Aperico made his successful return to bullfighting ten weeks later.

Although the odds are stacked wildly in a matador's favour, with relatively few being killed compared to the thousands of bulls slaughtered in the ring over the years, it is still a gruesomely hazardous occupation.

When Juan José Padilla, one of Spain's greatest exponents, known as the Cyclone of Jerez, took on the final bull of the day as the highlight of the Feria del Pilar festival, the audience were anticipating a magnificent contest.

The bull was Marqués, ashy black, five years old, 1,100lbs, to whom an opponent is merely a moving target to rip apart.

Padilla was luminous in his trademark fuchsia and gold 'suit of lights'.

He ran towards the galloping bull, his arms high above his head holding his spiked rods like a viper preparing to strike.

Just before the bull could impale him, he jumped aside – but the bull landed a glancing blow sending the matador to the ground, lying helplessly on his side.

The great bull leant down sniffing, as though to lick him in canine tenderness, but instead drove his horn through Padilla's mouth, exiting through his eye socket.

Marqués galloped on, with Padilla being towed for a few feet before falling away. 'Cornadas' or gorings are fairly commonplace, and specialist surgeons are always on hand to deal with them.

But they could see this was a potentially fatal 'cornada'.

Again, doctors performed life-saving surgery, and were able to reconstruct his face using mesh and titanium plates to rebuild cheekbone, eyelid and nose.

His first words on regaining consciousness were, "Don't cancel any of my contracts in South America".

He returned to the ring six months later, wearing a black eye patch – now to be known by adoring fans as 'The Pirate'.

His fellow bullfighters carried him shoulder-high from the Corrida, after he had quickly killed his first bull on his debut following the miraculous recovery.

You don't have to wait as long to become a matador superstar in Mexico.

'Michelito' Lagravere killed his first bull at 12 years old.

He got tossed by his second opponent, weighing in at 900lbs and many times his size.

He subsequently killed over 50 bulls – six in one day in the ring at Mérida to achieved his ambition of gaining a place in the Guinness Book of Records.

I wonder in which category of recognition the honour was bestowed – a record for child cruelty awarded to his parents, or for animal cruelty to little Michelito.



LADIES who LIKE a LADYKILLER.

Richard Ramirez, the ‘Night Stalker’, killed a 9-year-old girl and twelve women aged between 22 and 83. Doreen Lioy married him in prison in 1996.

Why do psychopathic killers behind bars routinely get postbags full of love letters and marriage proposals? In a celebrity-driven culture, the more horrific the murderer, the more debased his crimes, the more female admirers apply to the prison for an opportunity to visit.

The women know that they are unlikely to get one-to-one communication with a movie idol or TV star – but if you contact a killer, he may write back.

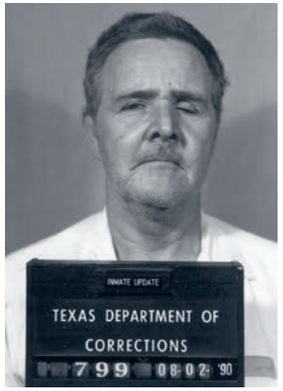
It isn’t necessarily the case that such women suffer from diminished self-esteem, or that they consider themselves social rejects, and identify with someone who is despised by the world.

Many of these ladies feel like redeeming angels, with the ability to change someone as cruel and powerful as a heartless, sadistic mass murderer.

And because she knows where he, the killer, is at all times, he appears to be the perfect boyfriend, someone to love her, to dream and think about, without the demand and insecurities of a normal relationship.

Curiously, many serial killer groupies are educated and attractive, who perhaps feel that getting involved with a violent, disturbed man is empowering in itself; that controlling such a man’s ego provides them with a visceral satisfaction.

Ready to make significant sacrifices, sitting for hours every week to await a brief face-to-face prison visit, they probably equate the brutality of their fantasy lover to masculine strength –



Henry Lee Lucas confessed to having killed 60, then 100, then 600 people. It is believed the true number was 11. Lucas was known as the 'One-Eyed Killer' – his brother had accidentally stabbed him in the left eye when he was 10. His mother ignored the injury for 4 days until it had become infected, and he was fitted with a glass replacement. Lucas received the death sentence, which was then commuted to life imprisonment. He was a popular prize courted by many serial killer groupies.

responding to their need for drama or to demonstrate their mettle by seeing the little boy in the killer, feeding an overwhelming desire to nurture and protect that side of them.

But what is it about psychopathic murderers that often makes them so beguiling, appearing engaging and captivating to many people?

One of the more prolific killers, Pedro Alonso López, the 'Monster of the Andes', butchered enough people, at least 300, to inhabit a small town.

After he murdered 100 tribal women in Peru in the 1970s, he was apprehended by the tribe's leaders, who were about to execute him when they were convinced by an American missionary to take him to the police authorities instead.

The police apparently found his persona quite charming, a plausible reason to let him go.

López moved to Ecuador where he proceeded to rape and kill 3 or 4 girls a week, aged 9 to 12 years old. He claimed his victims in Ecuador were "more gentle and trusting, more innocent".

He continued undetected until he was caught again in 1980, but police in Ecuador also appeared to find him likeable, and about to release him, when a flash flood uncovered a mass grave where he had hidden hundreds of the dead girls' corpses. López was finally jailed, but released in 1994 for 'good behaviour' and headed back to Columbia where he was declared insane, placed in the psychiatric prison wing of a Bogotá hospital but then released again on bail in 1998.

Waiting for him were many female suitors who had been captivated by his notoriety and transfixed by his winning replies to their fanmail.

More unfortunate was Andrei Chikatilo, the Ukranian who earned the title 'the Ripper of Rostov', the area where his 53 victims were murdered.

Perhaps less charming than López, Chikatilo was a chronic bed-wetter, who could only achieve sexual fulfilment by stabbing his prey multiple times, and slashing them to shreds.

He killed his known victims over a 20 year period, until finally caught and executed in 1994.

Neighbours however described him as a "warm companion and good company".

One of the reasons children are told to be wary of hitch-hiking a ride from a passing car is Gerald Stano. In his successful 8-year stint of picking up young women in his automobile, he entertained himself by using different methods to murder them – shooting, stabbing, or strangling over 40 victims.

He too built up a following of supportive female pen pals before being given the electric chair in Florida in 1998.

Gary Ridgway was straightforward enough to describe his desire to kill young women as "his career".

Known as the 'Green River Killer' due to his propensity to dump his dead quarries' bodies in Washington's famous waterway, he was appealing enough to attract many runaways, abducting, raping, and killing them. He was finally convicted in 2001 for a murder committed 20 years earlier, after the breakthrough of DNA evidence analysis.

He admitted to "somewhere around 90 killings" as part of a plea bargain to avoid the death penalty and serve a life sentence without parole.

I assume that few of these monsters are as bewitching as Anthony Hopkins in the role of Hannibal Lecter.

But it does seem that the more grotesque the murder, the more depraved the killer, the more barbarous their crimes, the more appealing they are to female devotees – despite knowing that the object of their affections will remain permanently incarcerated.



Narco submarines, as they are called, are now the favoured means for Columbian drug cartels to export their product.

The more sophisticated of the crafts are designed specifically to avoid detection by radar, sensor or infrared systems.

When the U.S. Coast Guard discovered their first drug sub in 2006, it was carrying many tons of cocaine. They traced three more, but even though they spot an average of ten each month, only one in ten are intercepted.

Few are seized, as their crews scuttle them upon the coast guard's arrival. Each sub costs two million dollars to construct, but in a single trip a single craft can generate $250 million in proceeds.

The Columbian Pacific coastline is fringed with a vast jungle, laced with thousands of miles of inland waterways; a perfect location for clandestine shipyards.

Although some of the subs were simple affairs, constructed in fibreglass and used only once, to be abandoned after a single delivery, other sturdier craft were capable of multi-trips, and likely used to ferry arms back to the cartels.

But it was the fibreglass vessels travelling barely beneath the surface that were virtually impossible to detect, well camouflaged, creating little infrared, and producing virtually no wake.

A HOME-MADE COLUMBIAN SUBMARINE for TRANSPORTING COCAINE.



A fleet of captured submarines used by Columbian drug cartels. Made of carbon fibre and able to travel 68,000 nautical miles, they use battery powered motors for travelling while submerged. Each vessel can carry $250 million of cocaine.

Fishing boats are always stationed along the way to alert the sub crews about patrols, and can provide them with fuel, water and supplies.

If the sub is detected, the crew sends the boat and its cargo to the sea bottom, and in accordance with maritime convention, the crew are rescued, and if no evidence is located, have to be released without charge.

A new law was enacted in 2008, making it a felony “to embark on a submarine without nationality in international waters”, allowing arrested crewmen to now face a prison term of up to 20 years.

However in 2011, 129 tons of cocaine were captured en route to the United States, five times the amount actually seized by operations on U.S. land.

Estimates are that three-quarters of submarine shipments pass through undetected, with too few coastguard ships and aircraft to patrol the vast area; the U.S. task force commander Admiral Michel admitted “My staff watches multi-ton loads go by, impotent to intercept or block a number of the craft detected”.

He believes that subs for drugs are used to drop off 30% of all cocaine sent from Latin America to the U.S.

More disturbing are the alleged links between Mexico’s powerful Sinalon cartel, with its own high-tech steel submarines, and terrorist groups including Al-Qaeda and Hezbollah, transporting their weapons and personnel into the U.S. alongside the vast cargos of heroin.

If you are interested in acquiring your own submarine, obviously for more mundane tourist cruising, anyone is free to acquire decommissioned military examples.

A P112 class Soviet sub built in the 1950s was sold in 2011 for $550,000. It has a range of 13,500 nautical miles.

Still available is a highly recommended S101 model, at $480,000, one careful owner, dive ready.

It is located in Seattle. If you want a trial run, call 206-422-2899.



HUNTINGTON BEACH, CALIFORNIA,

wasn't always

SURF CITY.

When oil was discovered in 1899 near Bakersfield, California, thousands of fortune seekers, oil companies and railroads rushed to the state, establishing oil fields up and down the coast.

Before it became a surfer heaven, sunbathers would bask on the beach with gushers of black oil as a backdrop.

Huntington Beach was originally occupied by native Tongva people before Manuel Nieto received a Spanish land grant for the majority of the area in 1784, moving the Indians from their home to build his modest 300,000 acre Rancho Los Nietos.

When railroad magnate Henry Huntington was given authority to improve rail access in California in 1901, he included a local stop at 'Rancho' on his electric railway, in what had become a little township and Huntington Beach was christened by way of corporate sponsorship.

The sleepy seaside town didn't really thrive until the great oil boom of 1920, when the largest oil deposit in California was found right under Huntington Beach .

"Oranges and Oil – A combination that's hard to beat," declared one 1921 promotional poster for the area, accompanied by a picture of both – orange groves and large oil derricks side by side.

With improving machinery, oil wells sprang up overnight and in a few months the town's population had quadrupled.

By October 1921 the beach was producing 16,500 barrels of oil a day.

People drawn to the area at this time couldn't find a house or apartment to rent – property was in such high demand that many newcomers had to live in tents. This appeal is still evident today, with several trailer parks in the surrounding countryside.

Eventually, residents whose homes stood in the way of the ever-growing oil fields were incentivised to relocate.

The Huntington Beach Company was, and indeed still is, a major land and mineral resources owner in the city, but an interesting development occurred in 1910 that is still having repercussions.

At that time, land in Huntington Beach was so cheap that publishing company Encyclopaedia America bought up acres for just a few hundred dollars, as a promotional strategy to hand out small plots free to anyone who purchased a full set of encyclopaedias.

Even with this special offer, encyclopaedia sets were difficult to market, but they managed to sell enough to end up giving away some 600 plots to people across the country. The average size of each was 25 feet by 112 feet, too small to build very much on.

Ever since, developers have been struggling to track down the owners of these increasingly desirable 'encyclopaedia lots'.

According to a 1990 report in the *Los Angeles Times*, many of the plots were given to immigrants who bought the encyclopaedias to educate themselves, advising their children and grandchildren to hold on to the free land as it was bound to be worth something one day.

Their descendents – out of sentimentality or business savviness – doggedly refused to part with their property, to the point when the oilmen or land speculators made them truly irresistible offers of cash.

The oil companies were the area's primary employers until the 1960s, when commercially successful oil strikes began to decline.

But Huntington Beach became the fastest growing city in the U.S. in the 1970s and 1980s, with the area still a rich resource for farming.

But more importantly, the looming oil rigs began to be dismantled or concealed behind landscaping – and the centre established itself as Surf City, the beach paradise, the pride of the California coast.

Just down the road from Huntington Beach you find the small town of Mentryville – an oil drilling town that was created in the 1870s by a gentleman named Charles Mentry.

Pico Number 4 was the town's oil derrick and the first commercially successful drill in California; it holds the world record for being the longest-running well, finally being capped in 1990.

Living in Mentryville was intended to be a utopian ideal, with Mentry not only bestowing his name on the town but also his values – alcohol, swearing and rowdiness were banned.

When Mentry died, all 200 of his devoted townspeople attended his funeral, and chipped in for a large floral arrangement in the shape of an oil derrick.

When the amount of oil that could be sourced started to diminish, so too did the population, and by the 1930s the town was largely abandoned, other than manning the single Pico 4 derrick.

The residents were thrifty folk, and many dismantled their houses, nail by nail, to take onto a new location.

Mentryville is now a ghost town; the relics of a glorious bygone era of oil are rusting, and the only building is Mr Mentry's abandoned mansion, being choked by weeds.

But it appears that California is potentially once again on the brink of an oil boom.



A healing bath in crude oil at Naftalan Therapeutic Centre.

California's coast has been found to be rich in shale – the finely stratified deep sedimentary rock formed from consolidated clay that eventually breaks down into oil – over 400 billion barrels of it, almost half the oil in the whole of Saudi Arabia.

Oil companies are battling hard to override the state's environmental lobby, and move forward with new mining techniques.

Thermal fracking, the process of injecting water and chemicals into the ground at high pressure to free up the oil, is still controversial, and troubles the present residents of the area; unlike the treasure seekers of old, they are environmentally-minded gentler souls who have a love of the surf and natural locally-harvested food.

It is generally accepted that fracking, which most experts see as a miraculous source of new energy provided via advanced technology, will soon be embraced across all countries wherever shale is to be found. Large volumes of it sit beneath Britain, you will be pleased to know.

Surprisingly, there are parts of the world where oil mining has been incorporated into a healthy-living regime.

Azerbaijan was a leader in oil exploration and is still a major producer and refiner.

In one of its provinces, Naftalan, the gunky crude oil is too heavy for normal export use, unlike the oil found in the Caspian Sea; so it is used solely medicinally.

Once a popular vacation spot of the Soviet Union, Naftalan's 'petroleum spas' are thriving. They use crude oil to treat psoriasis, stress, arthritis and rheumatism; the treatment offered involves sitting in a bath and being covered up to the neck in oil.

Naftalan Therapeutic Centre attracts many believers in the oil's healing properties, and new spas are planned to attract tourists.

Not wishing to cast a negative note, it is however not clear whether crude oil may also be a carcinogen.



A SURVIVOR of the NUCLEAR BOMB TEST in NEVADA DESERT, 1955.

At the height of the Atomic Age, a giant mushroom cloud billowing over the Nevada desert was celebrated as a symbol of American power, in the heat of the Nuclear Arms Race between the U.S. and the Soviet Union.

The explosions were carried out at the Nevada Test Site, a piece of land in the desert the size of Connecticut at 3500km square, where a remarkable 928 nuclear tests occurred between 1951 and 1992.

In 2009 the Nevada Test Site was officially declared the second most radioactively contaminated spot on the planet after Chernobyl. Radiation levels in some areas of the site actually exceed those present in Hiroshima and Nagasaki immediately after the A-bombs were dropped in 1945.

When this photograph was taken in May 1955, it was part of 'Operation Teapot', testing the effects of an atomic explosion on everything from clothing to canned and bottled beverages.

The question facing the government was how best to survive the aftermath of an atomic attack if nuclear warfare broke out.

If the water supply was contaminated due to widespread radioactive fallout, what was one to drink? Operation Teapot claimed that after thorough testing, canned drinks, particularly beer, survived explosion even at close range. They were declared to be safe to consume once the mushroom cloud had subsided.

Taste-testers were employed to bravely drink the potentially poisonous beverages, and stated that beer flavour had only altered

very slightly. Scientists today are dubious about the accuracy of this claim.

During the 1950s the atomic tests were causing a stir in nearby Las Vegas and acting as a popular tourist draw.

Casinos threw ‘dawn parties’ as bombs were tested in the early hours, and promoted the Atomic Cocktail (vodka, brandy, champagne and a dash of sherry) and pinups such as Miss Atomic Bomb were said to radiate “loveliness instead of deadly atomic particles”.

With one detonation occurring every three weeks in the 1950s, the Las Vegas Chamber of Commerce created a calendar detailing the time and date of each blast along with suggested viewing spots. All this earned Las Vegas the nickname Atomic City, and 8 million people visited the city in 1954 to take advantage of the unusual combination of slot machines and atomic bombs. Such parties continued until the Limited Test Ban was issued in 1963.

Local children and adults in Nevada could also feel a part of the tests as they were encouraged to sit outside and watch the mushroom clouds that were created by nuclear bomb explosions.

Providing they wore dark glasses or looked away for the initial flash of white light, they were promised no ill-health effects by the Atomic Energy Commission pamphlets.

Many were given radiation badges to wear on their clothes, which were later collected to gather data about radiation levels outside the immediate test site area.

The badges however did little to measure beta radiation, the particles that are released into the air during an explosion and cause skin to burn when subjected to it.

They also did little to measure the radioactive particles that are ingested into the body, where they continue radiating for many years and are more serious than any external radiation measured by the badges.

However, this testing provided a marketing opportunity for Dorothy Gray Salon Cold Cream; they demonstrated their



A mannequin is carried away for testing, Nevada 1955.

product by splashing a small amount of radioactive dirt onto a model, and then held a geiger counter up to her face, promising that Salon Cold Cream not only gives you a perfect complexion, but removes any radioactive deposit.

In the Nevada Test Site a million-dollar village was built to test the effects of an atomic blast on a normal town, and was filled with the eerily smiling mannequins pictured.

The condition of the figures – one charred, another only scorched, others almost untouched – showed that the blast was discriminating in its effects, and the village and mannequins helped to guide civil defence planning, in the belief that even amid atomic holocaust careful precautions could save lives.

As well as mannequins, tests were conducted on animals. For the Plumbbob and Priscilla series of blasts in 1957, pigs were kept just outside the test site for various analyses.

They had been specially bred due to the similarities in pig and human physiology. For some experiments, pigs were outfitted in



A town built to have its destruction quantified, Nevada 1955.

various types of material, including military uniforms, to better understand the effects on clothing, skin and internal physiology.

Of course, the effects of real Atomic warfare were devastating when nuclear weapons were dropped on Hiroshima and Nagasaki in Japan in 1945, bringing an end to the war.

Whilst these explosions killed and affected thousands, only one man has been officially recoginised as a survivor of both atomic bombs, Tsutomu Yamaguchi. Yamaguchi was a young engineer and resident of Nagasaki, but was in Hiroshima on business when America dropped the ‘Little Boy’ bomb on the city at 8:15am, on 6th August 1945.

The explosion ruptured his eardrums, blinded him temporarily, and seriously burned the left side of his torso. After finding shelter he painfully made it back to Nagasaki the following day.

Yamaguchi received treatment for his wounds and despite being heavily medicated, he reported for work on 9th August.

His workplace was 3 kilometers from ground zero of the second bomb, ‘Fat Man’. Yamaguchi’s wounds had to be kept bandaged after that explosion for 12 years, and he suffered permanent deafness in one ear. His son who was exposed to the blast in Nagasaki at 6 months old, died young of kidney and liver cancer and his two daughters remained sickly all their short lives.

Despite living through such a traumatic experience Yamaguchi survived to the age of 93, leaving his legacy as a reminder of both atomic warfare, and his comparative good fortune.

The rubble of the test village in Nevada, known as ‘Doom Town’, still remains, and four times a year opens its robust military gates to tourists.

However, if you are interested in examining the after effects of a more current nuclear blast, the most recent atomic test was carried out by North Korea in 2009. I am unsure of visa protocols you may require.



RUSH HOUR in TAIPEI lasts

A L L D A Y .

Taipei belongs to scooter drivers.

They frequently make turns without looking; their argument goes that if you look, you are certain to have an accident, as others are streaming beside you.

They also run red lights with impunity, and car drivers have to be prepared for a scooter to enter the road at anytime, regardless of traffic lights.

Most driving laws are irrelevant. The abiding rule is: you are responsible for what is in front of you.

Foreigners are understandably fearful of driving in Taiwan.

High traffic density, a potent mix of trucks, motorcycles, bicycles, and cars mean unremitting attention is required.

Further, many locals have no formal training in driving and pay no attention to the law even in the unlikely event that they know it.

A car driver is always considered at fault if he collides with a scooter.

The highways in Taiwan are a comparative oasis of safety, though they are frequently jammed solid from one end of the island to the other on festive days.

And in the early hours, they are often used as 200mph race tracks by the local sports car aficionados.



But there are many contenders for the most gridlocked roads from all over the globe.

The Beijing–Tibet Expressway is unfortunately named, because tailbacks often stretch as far as 100km, with 400 police officers routinely required to quell rising tensions. Vendors are waiting every fifty yards to charge exorbitant prices for tea and noodles.

A traffic jam in China entered its ninth day before it slowly eased. Truck drivers played cards in the shade under their lorries, in North China's Hebei province.

Road weary commuters in São Paulo cope with record-breaking mega-jams by simply leaving their cars and sitting in a nearby cafe.

In Britain of course, a slight dusting of snow can create transport havoc – memorably a 20 hour gridlock on the M11.

Few capitals on earth are immune. Bangkok drivers regularly spend two hours moving less than a kilometre.

In Indonesia they have a word, 'macet', for the traffic jams around which residents plan their lives.

In Nairobi, laziness and pride make walking frowned upon, with the worst traffic jams every Friday – if it has rained a little, traffic moves so slowly, people end up sleeping on the roadside.

In Manila, congestion is so bad, drivers are now only allowed to use their car on alternate days.

Dhaka in Bangladesh is the most densely populated city in the world. It lacks a mass-transit system, or a major highway to assist the 15 million people who live and work there.

Traffic laws are rarely enforced and vehicles move in an uncoordinated and terrifying dance routine, with dust, exhaust fumes, extreme heat, dense humidity, and many rickshaws to add exotic atmosphere to the slow mayhem.

Next time you are in London, and an aggressive white-van driver swears loudly at your incompetence, or a taxi driver hoots you irritably as he cuts you up, simply wish them to Dhaka.



BLACK SLAVES built the WHITE HOUSE.

This photograph was taken of a man known only as Gordon, during his medical inspection to join the U.S. Army. He wanted to fight for the North in the Civil War, and arrived at Baton Rouge, Louisiana in 1863.

He was in poor shape, and the swollen welts of severe flagellation were evidence of the mistreatment he had suffered at the hands of his Mississippi owners.

Gordon had been so terribly beaten by his masters that he decided to try his luck at escaping – a risky business because slaves caught fleeing by the plantation teams of overseers were punished by death.

Gordon, "displaying unusual intelligence and energy" (*Harper's Weekly*, 4th June 1863) managed to go undetected as he ran through the plantation, rubbing his body with onions to mask his scent from the bloodhounds.

His escape was beset with misfortune; he was captured and tortured en route by rebels who left him for dead.

When Gordon gained consciousness he was barely strong enough to make it to Baton Rouge, where he became the first black man to enlist in the Army, fighting for the emancipation of his fellow slaves.

Harper's Weekly published the image in June 1863 with the caption "A Typical Negro".

Gordon was transformed into a hero and his tale inspired many freed slaves in North America to enlist. His horrific photograph was reproduced and circulated all over the country,

making it one of the earliest examples of photography used as propaganda.

Flagellation was not the worst punishment used on slaves; burning embers would be poured on them for what was deemed a serious offence.

As one of Virginia's slave codes stated: "If any slave resists his master... correcting such a slave, and shall happen to be killed in such correction...the master shall be free of all punishment... as if such accident never happened."

The story of Margaret Garner reinforces the history of African Americans pre-Civil War. Margaret Garner was a slave who fled Kentucky for Ohio with other slave families.

She and her children were caught by slave catchers and Garner killed her two-year-old daughter with a butcher knife, rather than see her return to a life of slavery. She was about to kill her three remaining children, and then herself, but was stopped when officials intervened.

She was tried for murder in Ohio, a free state, and the core issue was whether she would be tried as a person, and charged with the murder of her daughter, or tried as property under Fugitive Slave Law.

While deliberations continued she was returned to her master with her children.

Ohio officials gained a warrant to pardon Garner of the murder, but were never able to track her down as her owner kept moving her between plantations.

On shipment to Arskansas, her boat hit a storm and a daughter drowned. Garner was pleased for her daughter, but felt cursed that she and the rest of her family had survived the chance of death once again.

Margaret Garner eventually died of typhoid fever on a plantation in Mississippi in 1858.

The White House and United States Capitol, two of the most celebrated architectural symbols of freedom, have histories



Disciplinary power was sometimes transferred by slave owners to patrollers, mostly poor whites, who were tasked with flogging slaves who had 'violated' the slave codes. It was frequently carried out at markets, or traders' yards, where locals gathered to watch.

tarnished by slavery. Where there are now gardens would once have stood slave tents and shacks.

During research for the 200th anniversary of the White House in 2000, pay slips were unearthed that each stated the name of a slave owner and a monthly payment of $5 a month for the use of their slave to work on the White House; much the same as the rental of a horse or wagon.

The White House was designed by Irish Architect James Hoban on the site that was selected by George Washington.

Construction started on 13th October 1792 and its first inhabitants were John Adams and his wife Abigail, who moved in in 1800 whilst it was still incomplete.

Uncommonly for the time, the Adamses moved in without any slaves, and it was well known that Abigail did her own washing,

hanging it out to dry in the grand and stately East Room when it was not in use for entertaining.

However, the following three Presidents did not follow their lead and brought slaves with them.

Thomas Jefferson, although he was officially opposed to slavery, still owned many slaves, sharing the common understanding that slavery was a ‘necessary evil’.

It was not until Abraham Lincoln finally abolished slavery across all States in 1865 that slaves left the White House for good.

The expansion of the United State Capitol in 1850 included the huge dome that is now its most recognisable feature. On top of the dome is Thomas Crawford’s bronze statue *Freedom*, where it has lived since 1863.

The statue’s title is somewhat deceptive; the work to cast it and hoist it to its new home was all undertaken by slaves.

Most of the casting and moulding was done by women and children who couldn’t take part in the heavier manual labour, and the logistics for hoisting the statue was also undertaken by slaves.

At that time, Paul Jennings, a slave who had grown to an administrative position wrote his memoirs of life inside the White House, *A Colored Man’s Reminiscences of James Madison*, the President he had served.

The text is the only document in the history of slavery of its time.

A white acquaintance wrote down his story, as it had been illegal to educate slaves, and Jennings could not read or write effectively.



Each DAY in Afghanistan COSTS the U.S. government MORE THAN it did to BUILD the PENTAGON.

The Pentagon, the U.S. Defence Department main headquarters is the world's largest office building, at 6,500,000 square feet. It occupies fifty acres, has at least three levels below ground, and requires 17.5 miles of corridors to traverse.

America spends more on its military than the rest of the top 15 nations combined, with China at $120 billion, UK, France and Russia each at $60 billion, Japan $55 billion, followed closely by Germany, Saudi Arabia, India etc.

The United States' annual defence budget exceeds $700 billion.

Conflicts in Iraq and Afghanistan have been incredibly expensive for America, particularly when in addition to direct costs there is the added burden of financing the debt the U.S. government has amassed, and medical support and care for the wounded.

Many predict that these additional burdens will eventually outstrip the direct budgets themselves. As of June 2011 the total cost of the wars in Iraq and Afghanistan cost approximately $3.7 trillion.

In comparison, subsidised healthcare for Americans has been estimated to cost $1.5 trillion over ten years.

Military expenditure has increased steadily over the decades, with defense options becoming increasingly high tech, and therefore expensive to run, develop and maintain.

Bases around the world account for much of the costs. The U.S. Military and Navy maintain headquarters in Germany, Japan, Cuba, Guam, Spain, South Korea, Italy, Kuwait, Israel, Bulgaria, Australia, Greece, UAE, Oman, Portugal, Greenland, Singapore, the Netherlands, Turkey, and of course the UK.

These all-important bases allow for global readiness, and the launch of the USA's newest military strategy, drones. These unmanned craft carry missiles and are used to attack targets with precision, with Djibouti, a mini-state on the Gulf, becoming the main base for U.S. drone launches.

These take off around the clock on missions to Somalia and Yemen, and are piloted from Creech, an airforce base in Nevada, over 8,000 miles away.

Operated by the CIA rather than the army, there is increasing concern that drones are an unacceptable weapon of war. A recent study by Stanford University puts civilians killed at between 1,500 and 2,500 since drone technology was first put into use, with only 2% of those killed constituting military targets.

The problem, the U.S. argue, is that terrorists deliberately operate in the midst of civilians, using their countrymen as human shields.

The Pentagon itself occupies legendary status internationally.

This iconic, and impenetrable building houses archives of America's most secret missions, past and present. It is the most targeted building in the world.

The reason for its heavy concrete appearance, both inside and out, was that during World War II there was an enormous need for steel, and buildings had to be constructed with a minimum of the vital metal. 680,000 tons of sand were transported from the Potomac River to be mixed into concrete and poured.

The site was located just across the river from Washington, technically in Virginia, and as such the building was designed according to the laws of segregation which were in operation at the time.

Dining areas for black people were positioned in the basement, and separate toilets were built – the Pentagon as a result has double the number of toilets stipulated for a building of its size. Roosevelt finally ordered the building to be exempt from the segregation laws, making it the only space in Virginia at the time that broke this embargo.

An insight into the daily routines of those who manage the world's security are the restaurants that have a presence there. Pentagon staff are treated to Subway, McDonald's, Dunkin' Donuts, Starbucks, KFC, Pizza Hut and Taco Bell. It is reassuring to know to know that those with their fingers hovering over the buttons of a dizzying level of armoury are pumped full of adrenaline-infused meat, alongside much sugar and caffeine.

Political heavyweights were keen to add $2.3 trillion to the defence budget over the course of the next ten years, a steep hike given the withdrawal from Afghanistan.

The Obama administration obviously agreed, with security spending under his administration accounting for one-sixth of all governmental outlays, and 40 cents of every dollar collected from individual income tax.

Spending is actually relatively higher than it was during the nuclear heights of the Cold War.

The anxiety felt in the U.S. clearly stems from the vulnerability still felt post 9/11 and the threat to domestic security.

And, of course, the role that America still occupies of protecting not just itself but the rest of the free world from rogue nations, maniacal despots, and fundamentalist extremists.



A LAST KISS for a SOLDIER, KILLED 23 DAYS later by BOMB SHRAPNEL.

Romantic kisses on a railway platform may soon belong to a bygone age, like this memorable photograph.

Warrington Station has decided to place a ban on loving goodbyes and tearful, amorous departures, placing many 'No Kissing' signs all over the station platforms.

Apparently, it has been decreed that adoring clinches get in the way of bustling commuters.

Many other stations are planning to follow this pioneering move, bringing an end to picturesque kisses such as this one, a feat of acrobatics as well as passion.

Instead, you may offer a modest wave to a departing loved one, standing at least a yard behind the yellow line in accordance with Health and Safety guidelines.

However, Warrington's initiative helped me remember reading about a particularly unappetising kiss.

Béla Kiss was a Hungarian serial killer, active around the beginning of the last century.

Kiss turned to murder relatively late in life, when he discovered that his young wife was having an affair. After his wife left him, he lived alone in his manor house with an elderly housekeeper.



The exciting Mr Kiss.

Kiss was well read, charming and entertaining company, considered by many local women to be a most desirable bachelor.

However, he was in addition a callously brutal psychopath, who embarked on a whirlwind of lethal attacks; he selected his victims from unfortunate young ladies who resembled his unfaithful wife in some way.

Kiss murdered at least 24 young women, each of whose bodies he deposited and pickled in large metal drums he kept in his garden.

When questioned by police on a routine enquiry, Kiss responded that the drums were full of gasoline, in preparation for the start of World War I and rationing.

Kiss then enlisted and joined his platoon, leaving his home in the care of his housekeeper; he left her one firm instruction – not to enter his secret room.

But police grew increasingly curious about the drums, still sitting untouched after two years.

They found that the metal drums each contained the corpse of one of his prey; in the secret room they found love letters from many women he had entertained before killing them, and shelves filled with books on murder techniques through the ages.

Kiss was clearly having multiple relationships with women who were seeking a marriage partner.

He operated by placing an advertisement in the lonely hearts column of local newspapers, leading many to seek him out as a potential husband. He killed them as the mood took him.

Unfortunately for the police, Kiss was a very common Hungarian surname, meaning ‘small’, and the Kiss they wanted was troublesome to locate, with many gentlemen named Béla Kiss in the military.

Eventually detectives managed to track him down, and discovered that that their Kiss was recuperating in a Serbian hospital.

The detectives set out to Serbia at once, but when they arrived at his bedside they found a corpse lying in his bed. But it wasn’t Kiss – he had substituted the body and disappeared.

There were many rumours and suspected sightings of this now much wanted man coming in from around Europe; none were ever confirmed, and Kiss managed to remain uncaptured for the rest of his days.

The Kiss of Death is familiar from the Gospels, when Judas identified Jesus to the Roman soldiers by kissing him at the garden of Gethsemane, after the Last Supper.

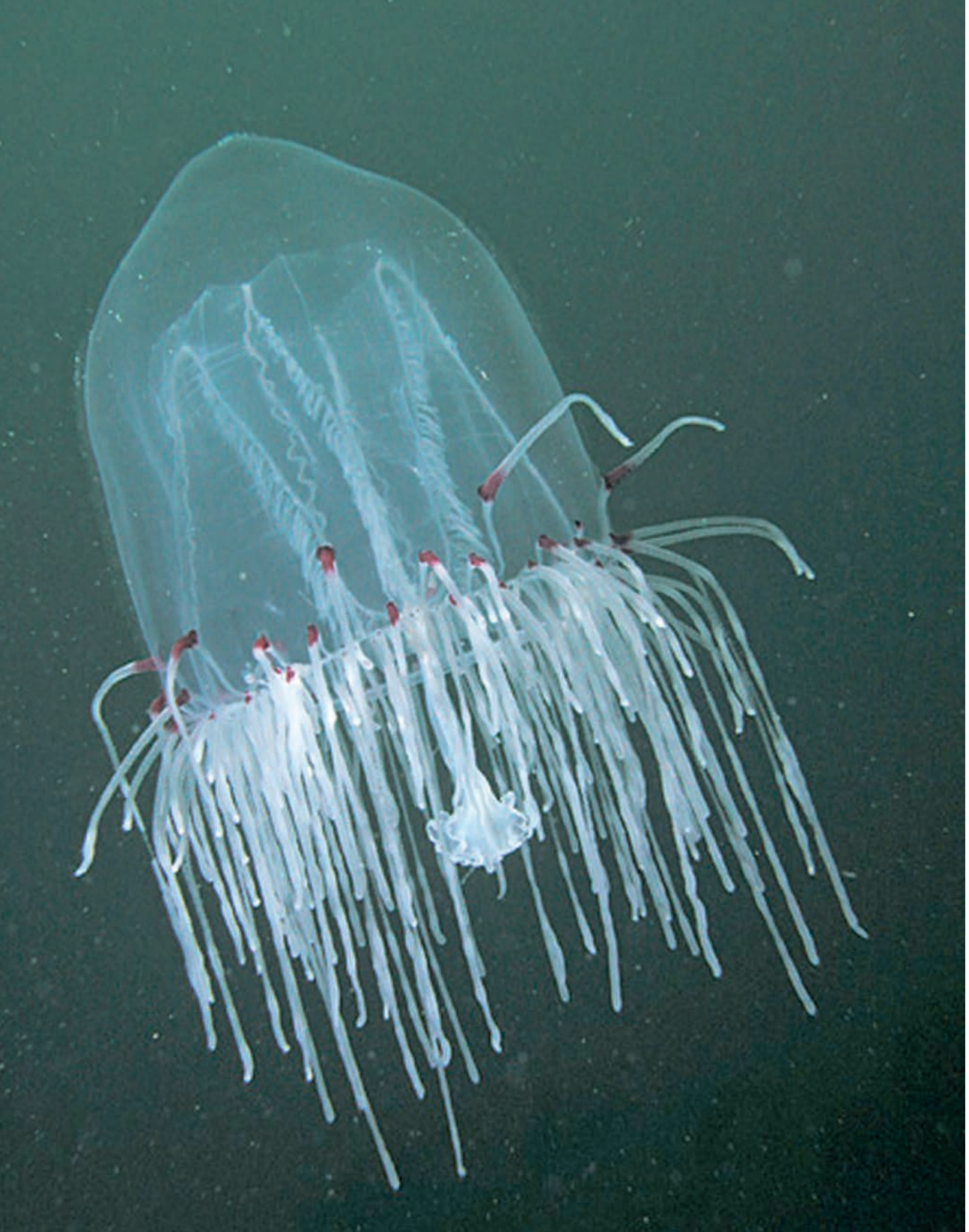
The Mafia also utilise a kiss as a sign that the recipient has been marked for execution.

‘Il bacio della morte’ was the renowned kiss that Don Vito Genovese planted upon Joe Valachi to inform him that his betrayal of ‘the Family’ was known, and that his demise awaited him.

The kiss then became a useful terror tactic to reduce a victim to a state of panic, ready to confess to anything, sacrifice anything, to avoid the doom awaiting.

My favourite of the genre was obviously the lipstick pistol, favoured by female KGB operatives during the Cold War years. Not a fantasy from a James Bond book, the lipstick fired a single 4.5mm bullet, deadly efficient at close range.

If you are ever passing the International Spy Museum in Washington DC you will find an example on display, retrieved at an American checkpoint into West Berlin in 1960, and labelled the ‘Kiss of Death’, naturally.



One of the most UNPLEASANT DEATHS you could WISH ANYONE.

The cubomedusa are the most venomous creatures on earth.

They are nearly invisible as they float in the seas of the far-eastern Pacific, but their tentacles often reach ten feet, and are covered in an array of cells with sufficient poison to kill sixty humans.

It would be hard for one of the cubomedusa to overlook you swimming nearby; they possess 24 eyes, and have the closest thing to a sentient brain in any known jellyfish.

Once touched, the victim goes into an excruciating spasm, followed by muscular paralysis, respiratory failure, and finally the welcome relief of cardiac arrest. The two minutes it takes to kill is believed to be one of the most agonising deaths imaginable.

In 1964 John Barnes, an Australian marine biologist, was searching for local jellyfish he thought could be responsible for ‘Irukandji Syndrome’ that was hospitalising swimmers with a particularly venomous sting.

He discovered a tiny species that he suspected might be the culprits on a Queensland beach. Unsure whether it was this type of jellyfish that was severely injuring people in the local sea, or whether this variety were merely capable of delivering a non-poisonous sting, he decided to test its toxin on three people: himself, a local lifeguard... and his nine year old son.



Dr Jenner discovering vaccination, by infecting his son with smallpox.

Irukandji syndrome had been described as unbearably painful; nevertheless, Barnes agreed to include his son in the experiment because the boy had apparently been curious to try it.

All three were rushed to the hospital emergency room the moment the venom entered their systems, writhing in convulsions of agony.

The three recovered, but most would agree that Mr Barnes deserved his suffering for being such a callously poor father.

He was not the only parent to use his child as a test laboratory.

In the late 18th century Dr Edward Jenner wanted to discover whether a bold new theory he had developed was correct: an injection of a very mild bovine ailment called cowpox would offer immunity to the deadly smallpox disease.

Jenner decided to test his notion by infecting his infant son, Edward Jr., with both cowpox and smallpox.

He based his thinking on the observation that people who worked closely with cows didn't appear to fall victims to smallpox – a deadly scourge at the time known as the Red Death, or the Speckled Monster.

In the era that Jenner infected his son, it was not simply a matter of an injection using a sterilised syringe.

He had to cut open his boy, and place cowpox bacteria beneath the skin, let it take effect, and the wound to heal, and then place the pus from a smallpox sufferer into a second incision in the boy's skin.

Extraordinarily, Jenner's theory of 'vaccination' proved to be correct: decades later his breakthrough began to be widely adopted, and led to inoculation saving countless people from terrible diseases.

I failed to mention that Dr Jenner also tested his theory on other children from the neighbourhood, alongside his son, and had the experiment not worked, he would now be remembered as one of the most notorious, horrific child murderers in history.

Smallpox carried on killing at a ferocious rate, with about 400 million victims in the 20th century.

As recently as 1967, 15 million people contracted the disease, with 2 million dying.

The World Health Organisation certified the final eradication of smallpox in 1975, after global vaccination campaigns.



DYING for a BREAD ROLL.

On 18th May 1896, a mass panic erupted on Khodynka Field in Moscow, during the festivities following the coronation of the last Russian emperor, Tsar Nicholas II.

A banquet was to be held for the people, with rumours that the Tsar would be giving away splendid coronation gifts. On the eve of the celebration, many thousands started to gather on the field in anticipation.

Suddenly, whispers spread that there would not be enough presents for everybody. A frenzied stampede erupted and the giant crowd were caught in a catastrophic crush, leaving 1,389 people trampled to death and about 1,300 injured; included were some of the 1,800 strong police force rushed in to try and maintain civil order.

Tragically, it turned out that the gifts were merely a bread roll, gingerbread, a piece of sausage and a mug.

The new Tsar Nicholas and wife Alexandra spent the rest of the celebration day visiting the injured in hospitals.

A ball was scheduled that night at the French embassy in Moscow, but Nicholas thought it might appear callous to attend, giving the impression that he was feeling no grief for the loss of his subjects.

However the brothers of the previous Tsar, Alexander III, held much sway in the court, and Nicholas' uncles instructed him that snubbing the ball would be seen as a grave insult to the French, more damaging than seeming to be uncaring about his Russian citizens.

Nicholas and Alexandra decided to enjoy the ball – for diplomatic reasons.

An Orthodox church was built on Khodynka Field to commemorate the incident, and much financial aid was given to the families of the dead and crippled.

But the negligence of the Imperial authorities caused widespread indignation – and mystics started proclaiming that Nicholas' attendance at the Coronation ball would lead to his doom.

As Balmont wrote in 1905 "Who started his reign with Khodynka, will finish it by mounting the scaffold".

Nicholas, who soon came to be known as Bloody Nicholas following his brutal executions of many political opponents, and the pursuit of military campaigns on a hitherto unprecedented scale, finally abdicated after the February Revolution of 1917.

He was imprisoned, and finally murdered by the Bolsheviks, alongside his wife, his son, his four daughters, his physician, his footman, his wife's maidservant, and his family cook.

Nicholas and Alexandra were canonised and declared martyrs by the Russian Orthodox Church in 1981.

Even today, many people are trampled to death when caught up in a panicking crowd.

In January 2013 a blaze raced through the Kiss nightclub in Rio Grande, Brazil in the early hours of a Sunday morning.

As smoke filled the dance floor, 245 were killed in the stampede for the exits.

TV crews captured shirtless partygoers joining firefighters in wielding axes and sledgehammers at walls and windows, in an attempt to break through to survivors inside.

Fire officials reported that at least one exit was locked, and that club bouncers initially blocked fleeing patrons, thinking they were trying to skip out on their bar tabs.

The cause of the fire? Band members on stage lit flares and fireworks to heighten the excitement of their act.

Pointed upwards, they quickly set alight the ceiling, filling the club with toxic smoke from the burning soundproofing above.

90% of victims died of asphyxiation, or from being trampled upon, with far fewer actually being killed by burns.

Survivors said the poisonous smoke affected their nervous system so swiftly people were disorientated, and confused a bathroom door with an exit.

At least 50 bodies were found inside the bathroom.

The club was at maximum capacity of 1,500, dancing to a driving mix of Brazilian country music. Most of the young dancers were in Rio Grande because it is a university city.

Nightclubs around the world regularly kill occupants on a gruesome scale, when a flash blaze creates mayhem.

Tragically, the Hellraiser club was too aptly named; 170 were burnt alive in its basement dancehall, with only a small exit upstairs.



The SHORT LIFE of ELIZABETH SHORT.

Her life was cut short, literally, when her body was discovered severed cleanly into two halves in a notorious 1947 Los Angeles murder.

One of the oldest unresolved cases in Los Angeles history it became known as the ‘Black Dahlia’, a colourful name for a particularly cold-blooded crime.

Elizabeth Short was 22 when news of her slaughter gripped the nation.

Even with violent deaths a commonplace feature of American life, Short’s grisly killing gave newspapers an exciting run of front page stories.

Readers were fixated with the emerging details about a young woman’s body found cut apart at the waist, lying on a vacant lot near Leimert Park.

Found in the morning by a local mother walking with her three year old daughter, she at first mistook Short for a discarded store mannequin.

When the police arrived they discovered the body sheared in two, completely drained of blood, with the face slashed from the corners of her mouth towards her ears, in a lipsticked maniacal ‘smile’. A terrifying sight even for seasoned detectives.

Multiple mutations on her body indicated where flesh had been removed – the corpse had been washed and cleaned, and



William Randolph Hearst was considered the founder of 'Yellow Journalism', sensational muck-raking stories that were frequently unreliable, but sold his newspapers very effectively.

subsequently dumped – but 'posed' with her hands over her head and her legs spread.

The press enjoyed further dissection, passing on each grisly detail of Elizabeth Short's life and death – and giving her the name the 'Black Dahlia' referring to a popular current film drama The Blue Dahlia.

They sensationalised every tabloid detail: the black tailored suit Short was last seen in became "a tight shirt and sheer blouse", and she was described as an "adventuress who prowled the Hollywood Boulevard" and that her lifestyle made her "victim material".

In fact Elizabeth Short was a waitress working in Los Angeles to be near her boyfriend, an Army Air Corps Lieutenant stationed there.

A detective who worked the case remarked that the large task force searching for the killer were swamped with tips, fed by the media frenzy about the story: "It is amazing how many people give up a relative as the killer", he remembered.

About 60 people confessed to the murder, mostly men but a few women, but none of them turned into firm suspects.

Someone claiming to be the murderer called the Editor of the *Los Angeles Examiner*, expressing concern that his crime was no longer the leading story on the front page, and offered to mail items he had taken from his victim to the newspaper.

The following day Short's birth certificate, photographs she carried, and an address book arrived at the newspaper.

The address book itself set the police a new task of eliminating every name it contained as a potential suspect.

But then other people started to contact the newspaper, one claiming that he was the 'Black Dahlia Avenger' and would produce one of Short's shoes and her handbag.

Although the Black Dahlia tale appears to have the making of a powerful Hollywood thriller, the movie made by Brian de Palma in 2006, was less than thrilling.

It was a money-loser for Universal Pictures; it appears that the only people who benefitted from the killing of Elizabeth Short were the press.

Circulations soared, doubling as the story escalated and captured the public appetite for the macabre.

It was certainly popular with William Randolph Hearst, the mogul proprietor of many leading tabloid papers, and immortalised by Orson Welles as Citizen Kane.

Hearst's *Herald Examiner* was the first newspaper to break the news of the dismembered body, and dub her the Black Dahlia.

Their reporters heard the police call on a radio tracker, and beat officers to the crime scene, and quickly started taking photographs.

The *Examiner* scooped its rivals by publishing an extra edition two hours before the afternoon newspapers hit the streets.

They went on to fill their front pages with Elizabeth Short for the next 10 weeks.



MADAME TUSSAUD'S EFFIGIES that SURVIVED the FIRE in MARCH 1925.

On the evening of 19th March 1925 fire ripped through Madame Tussauds Museum in London; it quickly destroyed much of the popular tourist attraction, thanks to liberal amounts of combustible wax acting as a dramatically effective accelerant.

The figures in the photograph were some of the few oddments saved by firefighters working in the building. Gruesome and gaunt, they look like extras from an early piece of zombie cinema.

The waxwork collection, which has been housed in Marylebone since 1836, lost many of its finest examples, as well as irreplaceable relics of the French Revolution.

Unlike the waxes, of which casts had been made so duplication was possible, certain treasures were lost forever. Napoleon Bonaparte's three carriages, coronation robes, the bed on which he died, and his familiar telescope were amongst the victims of the flames.

Reports noted that the waxworks could be heard sizzling through the roaring of the fire, as if in pain.

The museum's pet parrot was found comatose in its cage inside the burnt-out building – and onlookers were startled when it

suddenly burst into life as it was brought outside into the fresh air, loudly squawking “this is a rotten business”.

The institution is famous for celebrating celebrity of all kinds, from monarchs and world leaders, to stars of pop and TV whose fleeting interest will quickly expire, as will their waxworks.

However, the roots of the enterprise are surprisingly gory.

Marie Tussaud built her career making official death masks of the freshly guillotined victims of the French Revolution, including those of Marie Antoinette, King Louis XVI and Robespierre.

She would also tiptoe through the piles of corpses behind the guillotine to discover the most illustrious of the heads, and would promptly make casts of them, her hands bathed in their blood.

Tussaud was arrested during the Reign of Terror, but just after having her hair shaved off in preparation for execution, supporters saved her and helped her move to England.

Here, she created and displayed her effigies in travelling shows, and eventually settled at the museum’s current home near Baker Street.

Marie Tussaud would be pleased to learn that there are daily queues outside, with scores of visitors waiting to enter, drawn by seeing lifelike tableaux of Hollywood’s greatest names, as well as the grimly morbid Chamber of Horrors.

She would also be relieved that ‘Madame Guillotine’, as the giant razor was affectionately known, the symbol of the People’s Vengeance for supporters of the French Revolution, is no longer an icon of popular culture.

Surprisingly to me, it remained France’s standard method for execution until capital punishment was abolished in 1981.

The guillotine was also popular during Germany’s Third Reich, and continued to be employed until 1966.

During France’s Reign of Terror the Place de la Concorde housed the instrument, and became a popular family entertainment attracting crowds of spectators, standing on earth thick with the blood of the 30,000 who were killed. But by the end of the



Madame Tussaud created her waxwork self portrait in 1842.

Terror crowds thinned drastically; beheadings became so commonplace that audiences grew bored of watching the frequent decapitations.

Public guillotining continued until 1939, when a gentleman convicted of six murders was executed in the yard of the Saint Pierre prison, now home to the Palais de Justice.

The authorities decreed that further executions should be more discreet affairs after they learnt that that somebody, rumoured

to be one of the young Tussaud brothers, had obtained a film of the beheading, alongside relics of the original guillotine and blade the brothers had acquired, to be displayed at Madame Tussaud's, London.

You will be proud to know that Britain led the way in the first public guillotining, with the creation of the Halifax Gibbett.

Executions took place in the town's market square on Saturdays from 1280, until the gibbett had finished its work with a double beheading in 1650, after Oliver Cromwell banned capital punishment for petty theft.

Not all agreed with Cromwell, arguing that the sword or axe were perfectly humane ways to punish minor criminals – though these methods frequently required two or three blows to sever the heads of the condemned. They further pointed out that that it was a far more dignified death than the Breaking Wheel, whose purpose was to inflict great pain as you died, rather than simply taking your life swiftly.

Even in today's enlightened society, older execution methods employing the hangman's noose, or the gas chamber, or the electric chair are often a no less horrible a way to die as lethal injection, the mode now most widely in favour. There are simply too many reports of prolonged suffering, with chemical burns on the skin of the corpses, clearly inflicted pre-mortem.

I remember visiting Tussaud's Chamber of Horrors as a child, fingers laced across eyes as I nervously hurried through.

But there are clearly many people less squeamish, or less weedy, who admire another even grimmer attraction, the London Dungeon, a growing rival to Tussaud that features grotesque historical torture methods, and recreates the most violent and macabre historical dioramas.

It is, rather depressingly, so popular in its appeal that it is now moving from south east London to much larger premises in the city centre, displaying their own example of a Breaking Wheel underneath the iconic London Eye giant wheel.

The appetite for displays that glorify the gory seem to be wildly popular wherever I travel across Italy. And Dr Lecter's, or whoever's, tastefully-posed animal and human corpses, skinned and freeze-dried for our delectation, are constantly filling exhibitions touring Europe and America.

We seem to enjoy staring at waxworks of poor souls being agonised on the rack just as much as seeing screen idols, dolled-up in red carpet sequined splendour.



The most MONSTROUS MAN in Japan.

Shiro Ishii was Japan's Dr Josef Mengele. Like his Nazi hero, he also enjoyed performing medical experiments on humans, without using anaesthetic.

Unit 731 was Japan's biological and chemical warfare centre during the wars against China and the United States, waged between 1937 and 1945.

The plant was based in what at the time was a puppet state of Japan, Manchukou, now part of Northeast China.

The Unit was run by General Ishii, an expert military tactician and microbiologist.

Many thousands were murdered in human experiments and poison trials at his establishment; men, women and children, mostly Chinese.

Unit 731 was described as a water purification plant; it contained 150 buildings over a six square kilometre site.

Besides experimenting on civilians trapped in Unit 731, he conducted field tests of germ warfare agents and various dispersal techniques on Chinese prisoners of war, and inhabitants of Chinese cities.

He also liked to experiment by inducing strokes, heart attacks, frostbite, hypothermia, abortions at various stages of pregnancy, and death by starvation and dehydration.

Bacteriological weapons produced by Shiro Ishii's units were profusely used. The Japanese Air Force bombed Ningbo with fleas carrying bubonic plague, and toxic gases were used on 373 separate attacks on Wuhan and Changde.



Emperor Hirohito, a Living God.

Some historians believe tens of thousands died as a result of his bioweapons, death coming from tetanus and dengue fever, cholera, anthrax, and other horrors from the arsenal he deployed.

Arrested after Japan surrendered, Ishii and his team managed to negotiate immunity from any war crime prosecution, in exchange for full disclosure of his biological warfare data.

The Americans stated that his information was “absolutely invaluable”, and that it “could never be obtained in the U.S. because of scruples attached to experiments on humans”.

U.S. commander General MacArthur wrote to Washington to confirm that he had agreed “the invaluable information could be retained only in intelligence channels, and not employed as war crimes evidence”.

The deal was concluded in 1948, and neither Ishii nor his team members were ever prosecuted.

Instead it is believed they were taken to Maryland to work in the U.S. germ warfare development, where Ishii died aged 67 in 1959.

Of course Japan’s Emperor Hirohito, architect of the Japanese military machine, declared war on America by unexpectedly bombing Pearl Harbour, and also escaped prosecution.

Though he was clearly complicit in the worst of Japan’s inhumane excesses conducted during the war, it was considered important that he remained in place.

President Truman felt that the “administration of a defeated Japan would be greatly facilitated if the emperor appeared to be co-operating with the occupying Allied powers”.

However, whenever Hirohito travelled abroad, to Britain, the Netherlands, Germany and the United States, he was confronted with such powerful waves of protest it shocked the Japanese, who greatly revered him.

Like Hitler, Hirohito’s downfall appears to be simple hubris. Hitler inexplicably attempted to defeat the Soviet Union, while at the same time conquering Europe, and battling the Allied powers.

Hirohito felt he could defeat China in the war he started in 1937, and simultaneously defeat the U.S. in 1941.

Initially buoyed by Japan’s major victories in Shanghai, his armies quickly captured the Chinese capital of Nanking.

By 1939 the Chinese central government had to move to Chongqing in the Chinese interior. While that war raged on, Japan delivered its surprise attack on America’s Pearl Harbour; the following day World War II had a new theatre of operations in the Pacific.

After the Allied victory, part of the 1945 surrender agreement included removing all Japanese forces from within China.

But despite these setbacks Emperor Hirohito was still regarded as a Living God in Japan, and reigned until 1989.

During the post-war period, he became the symbol of Japan’s new position as a superpower, emerging as the world’s second largest economy.

He died at 87, and his state funeral was attended by the kings of Spain, Sweden, Belgium, Jordan, U.S. President Bush, French President Mitterrand, and the Duke of Edinburgh.

The same calibre of guest would no doubt have attended Adolf Hitler’s state funeral, had he not committed suicide, and remained at the helm of Germany “to greatly facilitate the administration of a defeated Germany by appearing to co-operate with occupying Allied powers”.



The JILTED BRIDE.

In May 2011 a grief-stricken bride sat sobbing on a window ledge 80ft up in a tower block in Changchun, China, her white wedding dress tucking out of the window.

Li-Wan's fiancé Wang Lu had thoughtfully decided to disclose to her on the day of their wedding that he had married somebody else.

Having already cut her wrists, 22-year-old Li Wan jumped off the ledge.

She was miraculously caught and saved by a local care worker, who grabbed her around the neck as she fell, her body dangling above the sheer drop.

One of the people accumulating in the crowd on the street below and in the windows opposite managed to capture this image, memorialising what should have been the happiest day of her life.

Li-Wan's reluctant groom must be an extremely fortunate man to have captured the hearts of two girls; China is suffering a vast surplus of single young men due to gender-based abortions which have been the norm in the country for years.

Many Chinese families in urban areas are restricted by the One Child policy, instated in 1979 to ensure the prosperity and control of China's population.

Precedence has been given to male babies over female for economic reasons, and to continue the family blood line – resulting in the births of yet more boys.

Whilst it is illegal to abort a baby if it is your first-born, it is still widely practised if the foetus is female. The result is that by 2020 there will be 30 million more men of marrying age than women in China.

We can only speculate about what will be the outcome of this imbalance when the poorest/ugliest/most unfortunate young men are left wifeless.

Perhaps this is the moment for a wily entrepreneur to build a mail-order-bride enterprise, for Chinese men to select partners from around the world.

Property developers have been alert to a potential real estate boom; females are more inclined to choose partners with homes, so parents of baby boys start saving for their son's nest egg before birth in the hope that they will be able to attract a wife later in life.

Li-Wan will no doubt have a host of eligible bachelors to choose from. But unfortunately, like everybody else, even a married Chinese woman is never safe from heartbreak.

One man divorced and sued his wife in October 2012 for the crime of being ugly.

Jian Feng was happily married to the woman of his dreams, a striking girl who produced their first child.

However, when holding his new daughter for the first time he couldn't find a trace of his wife's fine features in her chubby face; in fact she was aesthetically very disappointing to him.

At first Feng accused his wife of having an affair, until it surfaced that she had spent upwards of £60,000 on plastic surgery to be transformed into a beauty. She had hoped she wouldn't ever have to tell her husband, but admitted everything to save her marriage.

But Feng filed for divorce, claiming deception and being tricked into marriage under false pretences; the judge obligingly agreed and awarded him damages.

Perhaps the damage being inflicted on their baby girl will be even greater as she grows up and discovers her unfortunate features caused her parents' divorce.

Revealingly the tagline of a leading cosmetic surgery in Taiwan is "The only thing you need to be afraid of is how to explain it to your children", accompanied by a family photograph of a handsome couple and their three children who look somewhat less appealing.

The poor jilted bride could have found an enlightening guide from China's neighbouring Japan.

The Complete Manual of Suicide by Waratu Tsurumi shares explicit analysis on a wide range of suicide methods and has sold more than one million copies since its release in 1993.

The manual does not attempt to delve into the psychological and philosophical implications or reasons one might have for wishing to end it all, preferring to lay out the information matter-of-factly and devoid of emotion.

Each of the 11 chapters, (including overdosing, hanging, self-defenestration and, alarmingly, freezing) begins with a graph assessing the pain, effort of preparation, appearance of the body, the disturbance it would cause for others, and its fatality likelihood. Each of these is helpfully rated with skulls – 1 skull meaning you may possibly survive and 5 skulls meaning you will most certainly achieve death.

Although Tsurumi claims not to encourage suicide, his book has been found alongside the bodies of suicide victims, and phrases throughout the chapters such as "completely painless" and "marvellous experience" do not implore even momentarily that the reader seek help. It is left to the imagination how Tsurumi

gained evidence to prove that a particular suicide method was a marvellous experience.

Even if someone falls from a window, either accidentally or deliberately, and there's no handy 'catcher' to grab you, there is still a hope for survival.

Whilst some short drops can prove lethal, people have fallen from remarkable heights and lived, as a 102-year-old woman in Turin demonstrated in 2004 when she toppled from her fourth-floor balcony; her fall was broken, but not her. She landed unharmed on a children's playhouse.

The best fallers of course are cats, whose bodies are designed to withstand tremendous drops. Cats have a relatively large surface area in relation to their weight, and have an aerial righting reflex, an innate gift from their forebearers, the big cats living in trees in the jungle.

When they are falling they know to flip over like a gymnast and use their muscular, shock-absorbing legs to land on their feet. They also splay out to increase their surface area and relax into the fall.

You are unlikely to pull off this wonder if you are contemplating suicide by jumping from a great height. But hopefully you will attempt this near to Don Ritchie.

An Australian Navy Seaman in World War II, he lived next to The Gap, a high cliff that is a popular suicide location in Sydney.

Over 45 years Ritchie officially saved at least 160 lives.

Whenever he sensed a firmly depressed soul about to give up on life, his kind words and invitations into his home for a cup of tea proved effective in creating a miraculous change of heart.

Hopefully, for every *Complete Manual of Suicide*, there are many more complete samaritans like Seaman Ritchie.



They LOCKED the FACTORY DOORS to PREVENT their CHILD WORKERS LEAVING or PILFERING.

Then a FIRE IGNITED...

The Triangle Shirtwaist Factory fire, New York 1911, was the deadliest industrial disaster to take place on American soil.

The doomed garment factory was housed in a ten-storey building. Here row upon row of young women and children, mostly Jewish and Italian immigrants, toiled six days a week in nine hour shifts to produce women's tops known as 'shirtwaists'.

The fire was supposedly started by a cigarette tossed into a scrap bin on the eighth floor.

People on the floors below evacuated the building, but there was no general alarm to inform those on higher floors – one bookkeeper was able to contact staff on the tenth floor by telephone.

As smoke and flames penetrated each floor workers hurried to the stairway, only to find it locked – a practice used by the managers of the building to prevent theft by workers.

A foreman would unlock the door at the end of the day and check each woman's purse. But he had already fled the building with the key, leaving the staff trapped.

Some managed to escape using the freight elevators, but these were soon put out of use as the metal buckled in the heat.

One fire escape was initially usable, but was damaged and collapsed spilling scores to the streets below.

Many threw themselves from windows to avoid the flames, plunging straight through the nets held up by firemen. One witness reported seeing a young man and girl embrace at a high window and kiss, before dropping to the streets below.

146 people died in the fire; half of those killed were children under sixteen, some as young as twelve.

With the growth of the Industrial Revolution in the USA and Europe child labour was increasingly common.

Factories, coalmines, the general machinery of industry required increasing labour forces to keep the engine of commerce going.



A photograph showing employees of the Triangle Shirtwaist Factory before the fire. Many of the victims were young immigrant girls, aged 12–15.

Children made ideal workers – their small size was ideal to access the tiny spaces of mines and under factory machinery, their fingers deft and able to clean and maintain small parts.

Chimney sweeps are probably the most vivid child labourers from the time, as portrayed by Charles Dickens.

Taken from the workhouses from the age of four by adult chimney sweeps, they were 'apprenticed' and forced to climb up into narrow chimneys often only 18 inches wide.

Blackened with soot, they would often die of lung diseases due to the carcinogens they breathed in daily.

Some endured horrific deaths trapped in the chimneys – it was not uncommon for their masters to light fires beneath them to speed them in their work.

Other unlucky children were forced beneath the earth to push carriages of coal through subterranean tunnels of mines.

The youngest, who were not strong enough for such work, would man the doors that separated the various tunnels and maintained ventilation.

Children as young as four years old would work 12-hour shifts, cowering alone in the darkness.

In Scotland and Ireland double shifts were not unusual, with employees expected to work through twenty-four or even thirty-six hours.

Those who survived in such conditions were physically shaped by the labour. The limbs used to push and pull would have grown large and muscular, out of proportion with the rest of their bodies, often wasted and emaciated from malnutrition.

A miner could be recognised from other worker by a deeply-stooped posture.

Many suffered from stunted growth, and young girls would commonly reach puberty much later than normal.

Indeed the average height of the population fell in the 1830s, with the Industrial Revolution taking its toll on the increasing ranks of child workers.



Inside a Chinese computer factory, 15 year old girls are manufacturing Apple products.

'Match Girls' were susceptible to the condition known as phossy jaw, caused by the fumes from the phosphorous into which they dipped their matches.

It would eat at their jawbones, leaving empty cheeks oozing with infection, regularly causing brain damage and death.

It may be more comforting to think of child labour in the past tense, a barbaric practice of yesteryear.

Sadly, however children at work in factories is once again on the rise around the world.

The economic instability faced globally since 2008 has created financial desperation, and many of the nations that supply goods to the developing world have increased their rates of child labour.

The thirst for consumer goods has driven the demand for ever-younger workers.

Western companies have been embroiled in numerous disclosures about children working in their supply line.

In 2001 Nike was criticised for the large role children played in China and Cambodia manufacturing its footballs.

More recently Apple was upbraided after it emerged how many children in the Far East were building its products.

Between January and November 2010 eighteen teenage employees at the Foxconn factory in China attempted suicide, fourteen successfully. The suicides high-lighted employment practices at the plant, a large contract manufacturer catering to companies including as Apple, Dell, HP, Motorola, Nintendo, Nokia, and Sony.

The deaths prompted 20 Chinese universities to compile a report on Foxconn, which they described as a labour camp.

In other nations facing high levels of poverty children are essential workers, supplementing meagre family incomes.

Nearly 60% of children in Ethiopia are put to work as farm hands and in the country's gold mines. In the Congo a 30% of all mining activity is conducted by child workers.

Oppressive and war-torn nations make even more unpleasant use of children. In North Korea children are forced into labour as political prisoners.

In Somalia and Sudan boys are brutalised and recruited into the army to be used as soldiers, toting weapons that they can barely lift.

Often part of their recruitment involves them being forced to kill a family member as proof of their dedication.

Young girls are also seized and forced into work as sex slaves to soldiers.

The present day probably represents the grimmest new chapter in the use of the world's children, by the world's adults.



THE innocence OF ADOLF HITLER.

Adolf was the fourth of six children, but his three older siblings died in infancy.

There were persistent claims that Hitler's father Alois was the illegitimate child of Maria Schicklgruber, a housekeeper to a Jewish family in Graz, and that she had been having an affair with the 19-year-old son of the family, Leopold Frankenberger.

His father assumed the surname 'Hitler' at age 39, switching it from the Schicklgruber name on his baptismal register, which did not carry a paternal identity.

Hitler grew up in Passau, Germany when he acquired the lower Bavarian dialect which marked his speech for the rest of his life.

Adolf took singing lessons as an eight-year-old, performed in the church choir, and considered becoming a priest.

In 1900 the death of a younger brother from measles deeply affected him; he grew morose, a more detached and sullen boy, constantly battling his father and teachers. Up until now, a typical young teen it would appear.

He did poorly at school, hoping, as he explained in *Mein Kampf*, that his father "saw what little progress I was making and let me devote myself to my dream".

In a revealing book written over 70 years ago, his close friend August Kubizek wrote about the young Hitler he knew.

He claims that Adolf was romantically obsessed at the age of sixteen with a girl thought to be Jewish, Stephanie Isak.

His infatuation was intense, and for four years he stalked her constantly.



Young Hitler, dignified and self-assured, except around Stefanie Isak.

"Stefanie had no idea how deeply Adolf was in love with her; she regarded him as somewhat shy, but nonetheless a remarkably tenacious, and faithful, admirer.

When she responded with a smile to his inquiring glances he was very excited and his mood became unlike anything I had observed in him."

It would always infuriate Hitler to see her talking to young officers, as he felt he couldn't compete with lieutenants in their smart uniforms. He fumed in the shadows, describing them as "conceited blockheads".

At a festival, Stefanie rode by in a carriage, smiled at Adolf and picked a flower from her posy and threw it to him. His friend recalled that he would never see Hitler happier than at that moment.

But then Stefanie moved away, leaving poor Hitler heartbroken, and suicidal. Not quite suicidal enough, unfortunately.

Adolf wanted to be an artist, and following his father's death, he moved to Vienna living a bohemian life. He was financially supported a little by his mother, relying on manual labour, and his ambitions as a water-colourist, occasionally managing to sell some of his works.

But he was rejected by the Academy of Fine Arts Vienna because of his "unfitness for painting".

After his mother died, he ran out of money and lived in a homeless shelter.

At the time, Vienna was a hotbed of religious prejudice and racism.



Karl Lueger, long serving Mayor of Vienna until 1910. His colourful anti-semitism was popular and inspirational to a young Adolf.

Fears of being overrun by immigrants from the East were widespread, and Hitler's anti-semitism would not have gained any attention, as it was then pervasive in Vienna.

He was drawn by the virulent enmity to Jews in Mayor Karl Lueger's populist rhetoric, and was inspired by newspapers such as *Deutsches Volksblatt* that played on fears that Christians would be swamped by Jews and Catholics.

In 1913, he moved to Munich, probably to avoid conscription in the Austrian army.

Hitler later declared that he did not want to serve the Habsburg Empire because of the mix of 'races' in the army.

He enlisted in the Bavarian Army on the outbreak of World War I, serving as a dispatch runner well behind the front lines, fortunately for him.

Hitler was embittered by Germany's defeat, and like other German nationalists believed their cause had been betrayed in the home front by civilian leaders, politicians and Marxists.

Many concluded that the Versailles Treaty, that forced Germany to relinquish several of its territories, and enforced the demilitarisation of the Rhineland, was a humiliation.

The economic, social and political conditions in Germany after the war were the perfect backdrop for Hitler to exploit, as he started his extraordinary climb to ultimate power over his nation.

If only the Academy in Vienna hadn't been so snooty in turning away a hopeful student, how much more pleasant much of the last century would have been.



A CRANE SAVED by a MAN PRETENDING to be its MOTHER.

Only 21 Whooping Cranes were known to be alive in the 1940s.

Today we have around 600, living in parts of Canada and the U.S.A. Because of the shortage of mother whooping cranes, human conservationists dressed up as surrogates; they used taxidermied cranes to help train chicks to feed; they employed toy crane aircrafts to help young cranes learn to fly.

Of course some inhabitants of Earth have learnt not to offer their mothers unconditional love.

In the case of a baby wolf spider, you would probably fear that rather than her providing you with food, you would more likely be providing her with lunch.

A mother wolf spider sees her new borns congregate on her stomach and usually decides that some of them are more appetizing than adorable.

Only the luckiest babies survive her hunger pangs.

Lionesses can also make unreliable mums.

Despite all the wildlife footage of a mother playing with her young cubs and caring for them, the close-knit family is not always a secure one.

Everything changes abruptly if a new male lion takes over the pride.

Any cubs less than two years old are killed by the new head male, to stop any future rivals challenging him.

Strangely, this causes the lionesses to go into heat, allowing the new head of the pride to begin his own dynasty.

House sparrows look harmless enough, but the female bird will routinely seek out the nests of other females who have also mated with her male partner – and kill their chicks.

This removes the competition and ensures that the male spends as much time as possible helping raise her offspring.

Brutal it may undoubtedly be, but securing the survival of her brood would generally be considered good mothering.

Female frogs are not as callous, but nonetheless lose interest in their eggs once they have been laid; the male frog has to carry them around until they are ready to hatch. It is then his sole job to raise them, mother feeling she has done her part.



Taxidermied cranes show chicks how to feed.

One of the reasons Giant Pandas are regularly on endangered species lists is because mother pandas are so large compared to their tiny babies.

In a litter of three, only one will be likely to survive after a dozing mother rolls over in her sleep and crushes a cub looking for warmth.

Cuckoo mums are notorious for laying their eggs in the nests of other birds, passing on the responsibility to raise their young to other mothers.

A rather grisly species of ant waits for the queen of the colony to give birth to ant larvae.

Her worker ants then poke little holes in the larvae and suck away.

A mother allowing her young to be used as food for the colony is a sobering notion.

Black bear mothers can be cold-bloodedly ruthless if you are unfortunate to be born as a single cub, rather than part of a litter.

Mother then decides that it's just as hard work to raise three or four cubs as it is one, so the single baby will be abandoned, and a bigger litter anticipated next time.

Equally decisive are the Black Eagle mothers, who will lay two eggs, but then only feed one of the two chicks that hatch, leaving the stronger baby to peck its weaker sibling to death for food.

Nature's worst mothers? The dubious honour goes to the Langur monkey.

In their families, violent battles, kidnappings, sexual assaults, neglect, infanticides are all commonplace, all of the time.

They make the Galapagos sharks, who keep her young in shallow water nurseries till they mature, appear caringly humane.

The mothers in this case only eat their grown-up youngsters in a non-malicious act – treating it as she would any other foodstuff in the ocean.

Their logic? Why waste a perfectly good meal conveniently passing nearby.



SEVEN different LIONS have STARRED in the MGM LOGO since 1924. This is DAISY.

Metro Goldwyn Mayer, the largest of the film studios had an official motto ‘Ars Gratia Artis’, Art for Art’s Sake, and a logo bearing a roaring lion whose head was surrounded by this insignia.

The studio was formed in 1924 by Marcus Loew, an entertainment entrepreneur who gained control of Metro Pictures, Goldwyn Pictures, and Louis B. Mayer Pictures.

MGM was the last of the giant Hollywood studios to adapt to the sound era, but in spite of this remained a dominant force in motion pictures from the end of the silent era through to 1960.

Loew had bought MGM together to provide a steady supply of films for his large Loew’s Theatre chain of cinemas, and wanted Louis B. Mayer to head up the film production part of his empire.

From the outset MGM tapped into the audience’s need for glamour and sophistication, with a roster of stars signed contractually to the studio, including Greta Garbo and Joan Crawford, and bought out others to add the great names of the time, Buster Keaton, Lon Chaney, and William Powell.

They created their own stars once they had embraced ‘talkies’ and in the thirties and forties these included Clark Gable, Jean Harlow, Spencer Tracy, and the musical legends Jeanette MacDonald and Nelson Eddy.

They also employed an entourage of leading directors exclusively signed to the studio, and added smaller operations including Hal Roach to bring stars like Laurel and Hardy under their control.



Legendary Hollywood mogul Louis B. Mayer.

Then came the arrival of colour, a goldmine for MGM, who produced Technicolor triumph *The Wizard of Oz*, and released *Gone With The Wind* with David Selznick, Louis B. Mayer's son-in-law.

The film opened at Loews Grand Theatre in Atlanta, Georgia to awestruck audiences, and MGM's reputation as the champion studio was further enhanced by 'owning' Clark Gable, now the King of Hollywood after his wildly popular hit *It Happened One Night* in 1934.

After World War II, Mayer began to rely on the 'College of Cardinals', his most favoured producers, to control the studio's output.

But management by committee took its toll, and MGM lost its momentum, relying on sequels and more conservative material. The audiences they had built in the war years, when musicals were the perfect escape for the public, had provided financial hit after hit with the films of Fred Astaire, Ginger Rogers, Gene Kelly.

But after the war MGM continued making musicals that were expensive to produce, but fewer people wanted to see. Audiences drifted away, as television became central to many American's lives.

The government began to enforce anti-trust legislation to break-up the perceived restraint of trade created by the single ownership of both the production and dissemination of films, forcing Loew's cinema chain to give up control of MGM.

As the powerful Hollywood studio system faded, by 1957 MGM was losing money for the first time in its 33 year history. But in 1959, MGM enjoyed a remarkable comeback by risking an enormous budget to create *Ben-Hur*, a massive global hit that took 11 Academy Awards.

But this success proved to be MGM's undoing. They got into the habit of letting an entire year's production schedule rely on the success of one big-budget epic a year; sadly most of these ended as flops.

MGM's story became one of financial machinations, with a merry-go-round of ownership deals, partnership arrangements, consortium buyouts, re-structurings. The net result? In 2010 MGM filed for bankruptcy protection in a Chapter 11 re-organisation.

What has emerged from the ashes is unclear; MGM still exists, and this being Hollywood could suddenly arise triumphant, singing and dancing its way to the peaks of movieland glamour yet again.

Note: During the Golden Age, the studio system was created by the industry majors, known as the Big Five.

MGM led the field for eleven years from 1931 to 1942, with 20th Century Fox comfortably in second place. Paramount grew rapidly in the silent era, and boomed in the 1940s. Warner Bros were a strong 4th, but RKO started its decline by the 1950s. Columbia and Universal were considered the next tier down at the time.

Today we have the Big Six:

1. Sony who own Columbia, Tri-Star
2. Time Warner who own Warner Bros, New Line, Castle Rock, Turner Entertainment
3. Walt Disney who own Touchstone, Pixar, Marvel, Lucasfilm, ABC Television, ESPN
4. Comcast who own Universal, Focus, NBC Television
5. News Corporation who own 20th Century Fox, Fox Television, Searchlight
6. Viacom who own Paramount, Nickleodeon and MTV films.

CBS Television Studios have changed hands regularly over recent decades, with ownership moving between Coca-Cola, Gulf & Western, Decca, Matsushita, Seagram, General Electric, AOL – and various entrepreneurs and banks at times when matters became financially wobbly.



Ruth Snyder's LAST MOMENTS in side the EXECUTION CHAMBER,

Sing Sing correctional facility, New York, 1928.

In Virginia, USA, the electric chair was used to execute a murderer as recently as January 2013.

He asked for it – literally.

Robert Gleason had said in multiple interviews that he waived the appeal process while on death row, because he knew he would kill again if not put to death.

"Someone needs to stop it," he told Associated Press.

To emphasise his argument, he then strangled to death his cellmate, and killed a visitor by asking him to try on a "religious necklace" through the wire fence that separated them, and succeeded in also strangling him.

Gleason's attempt to speed up the execution process apparently worked, as did his request for death by electrocution, declining the option of lethal injection.

His court-appointed lawyers argued that he suffered from mental illness and diminished responsibility, but two independent evaluations deemed him capable of making his own decisions.



Ruth Snyder, the murderous femme fatale; Barbara Stanwyck played the character based on her story in the film *Double Indemnity*.

He was granted his desire to be dispatched speedily, and electronically.

The photograph here of Ruth Snyder dying on the electric chair was taken by a reporter for the *New York Daily News*.

He had smuggled a miniature custom-made plate camera into the execution viewing room, strapped to his ankle.

Moments after Mrs Snyder was declared dead, her lover and partner in their murder plot followed her into the chair.

Their crime became the basis of the classic film noir, *Double Indemnity* by Billy Wilder, in which a married woman embroils her boyfriend into a scheme to kill her husband, after first taking out a large life insurance policy.

Snyder had made at least seven attempts on her husband's life, all of which he had survived, unaware of his wife's actions.

Finally she and her lover, corset-salesman Judd Gray, garrotted husband Albert Snyder and staged it to appear a burglary. The victim having died of murder, the double indemnity insurance clause would apply.

The trial attracted lively interest, and the courtroom was packed with prominent writers, drawn to the intricacies of the tale.

Damon Runyon despaired at the crime's status as "brilliantly cunning, an ingenious plot to double the insurance payout" and nicknamed it the "Dumb-Bell murder case" because "it was so dumb".

In court, Ruth Snyder and Judd Gray each contended that the other was responsible for the killing, but the jury found them equally guilty, and they were both sentenced to death on conviction.

The photograph from Sing Sing's execution chamber was a front page sensation the next day, and circulated around the world.

As reports intensified of botched executions using electricity, lethal injection became the norm in most states, considered more humane.

The electric chair drew much criticism because it frequently needed multiple shocks to kill.

Nebraska introduced a new electrocution protocol in 2004, which required a 15 second long application of 2,450 volts; a fifteen minute wait for officials to check for any sign of life; then a further application if necessary.

Prior to this change, a cycle of eight-second applications were administered, with a one-second break between each round.

Reports of a subject's head catching fire, or of equipment malfunctions were gaining attention.

Operator error once resulted in the chair only succeeding in torturing an inmate – screaming and smouldering as he burnt, he survived long enough to be executed later in the year, in the same chair.



The MESSAGE her PARENTS WROTE on her FOREHEAD.

Scrawled on her forehead by her drunken parents as a joke, this photograph becomes, if possible, more disturbing when we learn that it was taken in the ‘rape capital of the world’.

In South Africa a woman is raped every minute, with 60,000 rapes reported to the police each year.

It is likely that the true figure is closer to 600,000 but many girls and women do not come forward to report their attackers.

In many communities young women grow up expecting to be assaulted, and young men grow up with a dangerous sense of entitlement.

Rape can also have fatal repercussions in South Africa, where more than 10 million people are infected with HIV.

The photograph was taken by photojournalist Mikhael Subotzky in a small transit town, Beaufort West in South Africa’s Western Cape.

It is a township built around a high security prison, in the middle of a junction on the country’s most travelled national highway.

Beaufort West is forgotten and ignored. Middle class, mostly white South Africans don’t like to associate their beautiful, sacred wilderness with the cripplingly poor, so they bypass the town completely.

Beaufort West also boasts its own depressing statistic: in a town of 37,000, over 20 people are murdered a year, a much higher rate than Johannesburg, itself one of the most dangerous places on earth. And by contrast, Barnet, a crowded London borough with ten times the population of Beaufort, has three murders a year.

Two thirds of Beaufort residents are unemployed, and it is inhabited by many who return to prison multiple times; most people simply gaze out at the traffic zooming past.

Once in prison, inmates model themselves on the fearsome rules of Cape Town's bleakest ghettos, and gangs: the notorious Numbers Gang among them.

The Numbers Gang controls the majority of prisons in South Africa. It is split into sub-gangs: the 26s, 27s, and 28s, with the 28s dominating over the others. The 26s are responsible for accruing cash, by gambling, smuggling and any other means possible; the 27s take responsibility for fighting on the others' behalf, and the 28s are the 'peace keepers' between all the gangs.

Leader and General of the 28s in Pollsmoor prison is the delightfully named John Mongrel, who has cut out a warder's eye since being imprisoned, rapes a different inmate bi-weekly, and kills wielding a plastic toothbrush melted to a knife-like point.

Everybody who can, gravitates towards cities, leaving the dead end towns for those whose lives have reached a dead end.

This means that becoming a farmer in South Africa, a traditional profession for countryside dwellers, is amongst the most dangerous jobs in the world. The murder rate for farmers is 313 per 100,000 – about 8 times the national average.

The little girl pictured is not alone in her plight, and Subotzky is one of the few brave and interested enough to enter into these townships, still effectively remnants of apartheid.

Documenting their lives, he is invited into the homes of locals, and tags along on robberies with his camera in tow. There is no shame or fear of capture in Beaufort West.



Subotzky photographs a carcass being prepared for a meal in Beaufort township.

His photographs give a rare glimpse into a world of the drunks, the prostitutes, the drug addicts, the criminals, hidden beneath the radar of South African tourism. They reveal the number of children being born into these circles with no option but to get involved in supporting their families with the only means available to them, usually stealing and selling their bodies.

Children exposed to alcohol and substance abuse in the womb suffer serious bodily defects, and surviving a typical family's lifestyle quickly takes a mental toll, a perfect environment in which to grow unbalanced sociopaths.



A PAIR of SHOES made from UNIQUE ANIMAL SKIN.

Big Nose George Parrott was a cattle rustler and outlaw in America's Wild West in the late 19th century. After a botched train robbery attempt, Big Nose killed two Wyoming sheriffs who had been sent to find him and his gang, and even with a $20,000 price on his head he continued robbing a few trains and dodging the law.

In 1880, two years after the double murder, Big Nose George was arrested in Miles City by two local deputies, after he had been overheard drunkenly boasting of killing the two men.

Parrott was returned to his native Wyoming to face charges of murder and was sentenced to hang on 2nd April 1881. However, he was prematurely killed when a lynch mob of over 200 angry locals broke into the prison; after dragging Big Nose out they strung him up on a telegraph pole, hanging him twice to ensure the job had been done thoroughly.

His body was bundled into a crude wooden box, where according to the book *The Legend of Big Nose George*, "The nose of the dead man was so large that it interfered with the lid of the coffin, and excess pressure had to be exerted to close it and nail it down".

With no family to claim the corpse, it was taken into the possession of Doctors Thomas Maghee and John Osborn in order to study his brain.

Osborn's wife was criminally insane and it is thought that he hoped to discover a cure for her by studying the brain of

a murderer. However, on examination the doctors found no difference between his brain and a normal one.

Not content with examining Parrot's insides, however, Osborn decided to put the rest of his body to use.

Osborn sent segments of George's skin from his chest and thighs off to a tannery with instructions to make a medicine bag, and a pair of shoes. He decided to make a death mask of Parrot's face, which was a gruesome, though common enough practice at the time, but it was slightly flawed because Parrot's struggling at the end of the rope had worn off his ears entirely, leaving his earless face looking somewhat bizarre.

Osborn reportedly wore the new shoes to his inaugural ball after being elected as the first Democratic Governor of the State of Wyoming.

The top of Parrott's skull, which had been sawn off to give access to his brain, did not go to waste and was presented to medical assistant Lilian Heath.

Heath went on to become the first female doctor in Wyoming and used the multipurpose skull segments as an ashtray, a pen holder and a doorstop.

The practice of making use of human skin has had a widespread use throughout history. During World War II, one woman took a fancy to making use of abundant supplies of the material.

Ilse Koch, known as 'The Witch of Buchenwald' was the wife of Karl-Otto Koch, commandant of the Nazi concentration camp, and she herself oversaw the prisoners in the camps.

Koch entertained herself by taking the skin from slaughtered inmates with distinctive markings and tattoos, and having these made into lampshades, gloves and book covers.

If you've ever wondered how reading a book could become a more tactile and intimate experience, then perhaps you would be interested in Anthropodermic bibliopegy: the practice of binding books in human skin, a technique that dates back prior to the 17th century.

Human skin lends itself to several different kinds of bookbinding; examples of the practice include anatomy books bound with the skin of dissected cadavers, and copies of judicial proceedings bound in the skin of the murderer convicted, to create a more personal feel.

Leonard Smithers was a London publisher associated with the Decadent Movement, and one of the few who dared to publish risqué works of the time, including those by Oscar Wilde and Aubrey Beardsley.

Among his publications were erotic novels bound with the skin and nipples from women's breasts. Smithers was not alone in pairing smut with skin; other reported examples include a copy of the Marquis de Sade's *Justine et Juliette* bound in the same tasteful way.

In the 1950s an infamous American murderer Ed Gein became the inspiration for the fictional serial killers in *The Texas Chainsaw Massacre* and *The Silence of The Lambs*.

Ever resourceful, Gein exhumed corpses from local graveyards in Wisconsin and fashioned keepsakes from their bones and skin. Despite having killed 'only' two women, the list of body parts found in his home in 1957 was staggering:

Four noses.
Whole human bones and fragments.
Nine masks of human skin.
Bowls made from human skulls.
Ten female heads with the tops sawn off.
Human skin covering several chair seats.
Nine vulvae in a shoe box.
A belt made from female human nipples.
Skulls decorating his bedposts.
A pair of lips on a drawstring for a window-shade.
A lampshade made from the skin from a human face.

Unless you are willing to murder somebody or dig up a fresh corpse and risk the consequences, human leather products are in shorter supply in recent times. However, a British-based company seems to be answering any international demand for such items.

At www.humanleather.co.uk one can purchase belts, wallets, and Power Bracelets for enhancing physical stamina, as well as immunity, virility, and fertility; even, à la Dr Osborn, human leather shoes.

They also offer bespoke orders, which I am too queasy about to investigate.

A made-to-measure pair of shoes costs upwards of 18,000 euros, but you are secure in the knowledge that each step you take is perfectly legal; the leather has been sourced from people who have chosen to bequeath their skin prior to death.

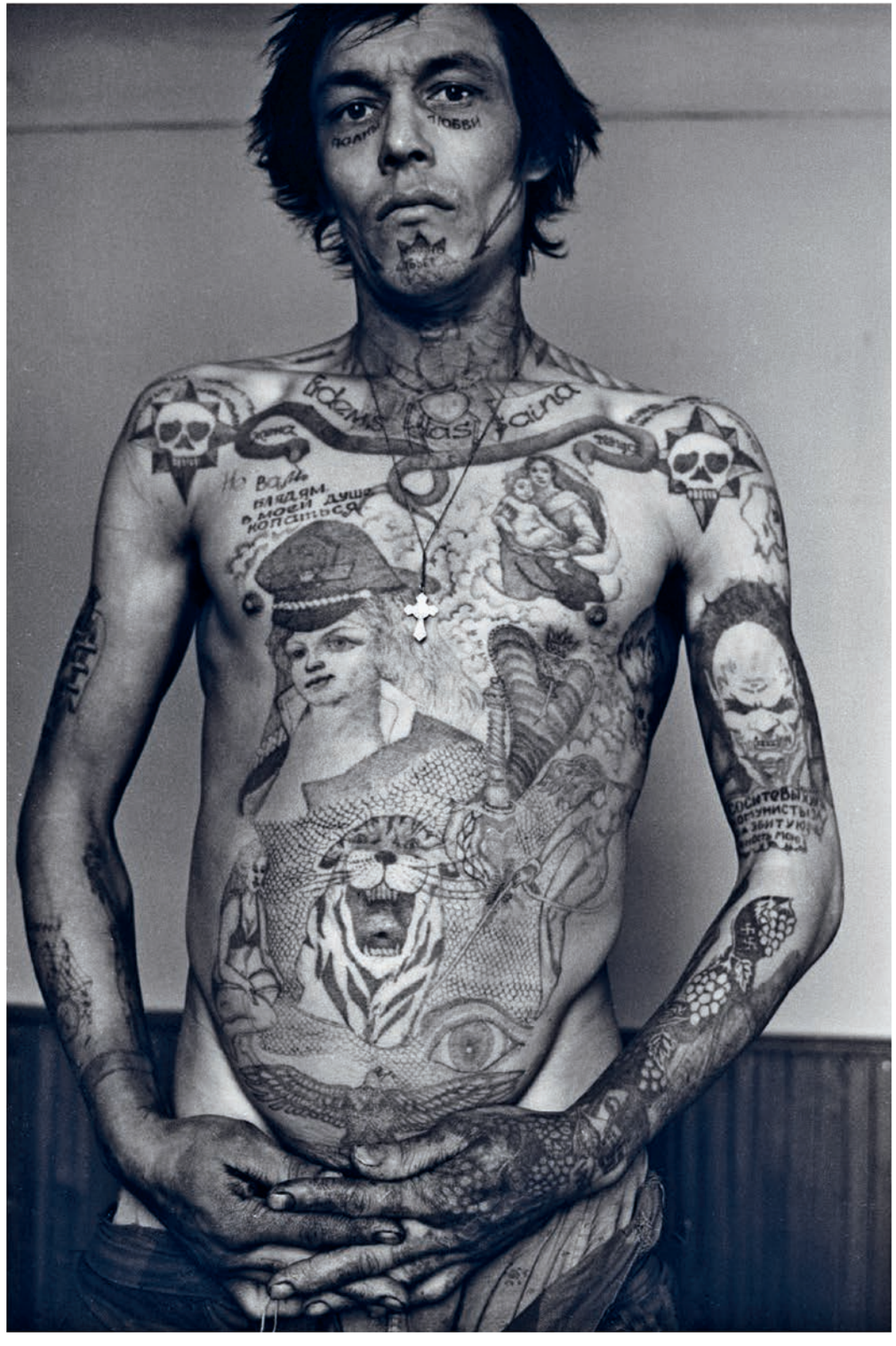
As Human Leather explains on their website "Human hide has been used by anatomists, tannists and medical scholars over the ages to bring life to their work and writings. Though unfortunately human skin has been lost in modern times as a working material, partly due to social and religious taboos, we as a group, have decided that humans can benefit from being re-introduced to their brethren in an elegant and artistic form".

They go on to explain that their human leather is "free from defects and that because it has the smallest grain size, it is the smoothest, softest leather on Earth. We have even had to turn away some potential donors as their skin doesn't meet our high standards".

The families of acceptable donors are, reassuringly, rewarded handsomely for their contributions, and comforted by knowing only a small but discerning clientele are allowed access to the restricted supply of finest quality skins.

So although you, and certainly I, may welcome the chance to be immortal, on fuller consideration perhaps the answer isn't to be turned into a suitcase.





In RUSSIA, a CRIMINAL'S BODY is their AUTOBIOGRAPHY.

Russia is home to the second highest number of prisons in the world, after the U.S.

Its harsh regimes house some of the most brutal inmates likely to be found anywhere.

Russia's criminals are known for their distinctive prison tattoos, which tell their life stories and their misdeeds.

Tattooing itself is a challenge. Without traditional ink, inmates are forced to be experimental and have found that a concoction of melted rubber from tires or shoe soles mixed with blood and urine gives the best results.

One tattoo artist made a homemade electric tattoo kit with a razor, ballpoint pen and sharpened guitar string.

Tattoos serve many purposes in prisons. Mainly they contribute to prison argot – a kind of slang, entirely separate from the Russian mother tongue, extending a dialogue of secret communication between inmates.

Tattoos also become a way to satisfy the needs of prisoners to depict the outside world; using humour, sex, politics, they act as a way of supplementing an individual's interests and provide something entertaining to look at for fellow inmates.

They also have ties to the kind of criminal the wearer is.

Prison tattoos are closely associated with the 'Vory-v-Zakone', or 'Thieves in Law', who are the elites of the Russian world of organised crime.

It is correctly translated as 'Thieves who follow the law', not referring to the state law, but to their own criminal codes.

There are thought to be over 10,000 Vory in the world, both in and out of prison, and being an accepted member requires extreme commitment.

After being recommended by an existing Vory, new recruits undergo years of apprenticeship, before being considered for inauguration into the criminal fraternity.

Once accepted, they will have fully agreed to give up ever having a 'normal' life.

In the period after the Russian Revolution in the early 1920s, poverty and life under Lenin's rule created thousands of street children and would-be criminals.

With most inmates to this day committing their first offences just out of puberty, and being held in adult prisons for up to four years whilst waiting for a trial, they quickly learn how to survive within the penal system. Prisons in Russia truly are criminal breeding grounds.

A few popular tattoos among Vory and lesser prisoners are:

Barbed wire: Each barb represents one year in prison.
Bells: This person has committed a serious crime and will spend the rest of their life in jail "from bell call to bell call."
Candlesticks: This person will extinguish you.
Cat: The sign of the thief and symbolises slyness or cunning.
Cathedral: The number of steeples might mean how many times the person has been to prison – the church is the house of God, as, the prison is the home of the thief.
Celtic Cross: Criminality is this person's chosen path in life and they accept that they will sooner or later come to a tragic end.
Crucifix and Jesus: Member of Thieves in Law.

Eyes: Have various meanings. If on the upper torso they mean literally that the wearer is keeping their eyes open, and the tattoo has been done voluntarily. If on the backside it is to show that the prisoner is used for sexual gratification – involuntary. If on the lower groin area it is to record humiliation – involuntary.
Military shoulder piece: These are reserved for various high-ranking criminal accomplishments.
Mother Mary & Baby Jesus: The bearer was born into criminality.
Rose: The bearer turned 18 in prison.
Stalin & Lenin: An image of either of these faces tattooed over the heart intend to demonstrate to a firing squad that they cannot shoot them there.
Sailing Ship: The person lives a roaming life and can be trusted in an escape.

Stalin decided to utilise Russian prisoners' love of killing in the Great Patriotic War, part of World War II's eastern campaign.

Prisoners sent to battle were promised their freedom by Stalin, if they made it out alive by the end.

Stalin's penal battalions were made up of known 'enemies of the people' – dangerous criminals and soldiers who had disobeyed orders – they were given the choice to die, or "redeem their guilt with blood" by going to war.

Penal battalions were dispatched to the front-line to be used as cannon-fodder for the German armies, used to clear mine fields by running through them, and sent to attack without sufficient ammunition.

From 1942 to 1945, 427,910 soldiers were assigned to penal battalions. After the war, surviving prisoners were not all freed as promised; some were returned to the prisons, and the rest found their way back in by continuing with their criminal pursuits.

Returning prisoners faced a tirade of angry inmates accusing them of being Suki, the name given to criminals who cooperate

with the government in some way, and so shatter the established codes among prisoners.

This was the catalyst of the infamous 8-year-long ‘Bitch Wars’ inside Russian prisons; many were murdered at the hands of their fellow inmates.

Often the Suki overcame their Vory counterparts, as prison guards aided the Suki, providing them with weapons and organising their battles. On one occasion when 150 Suki slaughtered 100 unarmed Vory, the victorious Suki were rewarded with supervisory roles.

The ‘Bitch Wars’ helped control the prison populations, which were difficult to maintain during the great famine affecting post-war Russia. The Vory and Suki are now referred to as the Blacks and the Reds; it is now commonplace to have predominantly Black or predominantly Red prisons.

In recent times, a romantic nostalgia for prison tattoos has arisen among older convicts.

Before, men facing their entire lives in prison, with no prospect of release, needed to establish themselves within the hierarchy of Thieves-in-Law, and embellished their bodies to demand respect from others.

Nowadays prisoners may expect to be freed at the end of a sentence, with prospects of a normalised life, and may not want to mark themselves forever as criminals through inking their bodies or faces.

Elderly inmates have more respect for the hearty traditional criminals who wouldn’t compromise by living in society.

Whilst hardened murderers used to have to earn their tattoos, young prisoners can now pay for their inky status without actually earning them, causing confusion in the ranks.

In past times, if an inmate couldn’t properly give the reason for having a certain tattoo, the other inmates would cut it off him.

The toughest prison in Russia is Selekamsk prison, known as ‘The White Swan’ for its grand white façade. It is the destination for the most fearsome criminal leaders and is intent on breaking them.

The guards have particularly cruel methods of dealing with their quarry, from passively painting fireplaces and radiators on to the walls of freezing cold cells, to placing a chosen inmate into a room shared for weeks with a dozen hand-picked prisoners, selected for their viciousness, so that the victim is too afraid to sleep.

It may sound like an agreeable country pub, but it would seem this White Swan is best avoided.





What's INSIDE your FRIDGE, Mr Dahmer?

Like you, I get a little queasy when I read about the unspeakable acts of sadism killers inflict on their victims.

But nothing can quite prepare you for the work of Jeffrey Dahmer.

From about the age of six, his facial expression was a motionless blank stare. He entertained himself by looking for roadkill, stripping the carcasses and collecting the bones.

His apathy towards the real world made him appear obedient to his parents and school teachers, but he was generally considered an oddball loner.

He dropped out of Ohio State University, and his father insisted he join the army to straighten himself out.

He was discharged because of a growing alcohol problem.

He started to gain the interest of police, arrested after exposing himself at a state fair.

4 years later, arrested again, for masturbating in public. 10 months in jail, and then rearrested after release for sexually interfering with a 13-year-old boy.

While on probation, he met 26-year-old Steven Tuomi and the two spent the night drinking heavily and cruising gay bars; they then went to a motel. Toumi died during the night, and when Dahmer awoke he found a new pleasure in necrophilia.

And so began a series of murders that fuelled Dahmer's fantasies to kill, and to then enjoy the corpse for sex; he also liked documenting each kill, saving and eating parts of the flesh.

He described his interest as "passive sex".

He found it easy to entice men he met in gay bars, lure them with alcohol and money if they agreed to pose for a photograph at his apartment.

Once he had them home, he would drug them, torture them, then kill them. Following sex with the dead body, he would sever the limbs into manageable pieces, mainly for disposal.

But he would keep part of his victim as a souvenir – a skull, a heart, genitalia, hands, and other pieces to be eaten.

His 13th victim became a problem.

He was a 14-year-old boy found wandering the streets by the police, nude and disorientated, as Dahmer approached them. Dahmer explained that he and his 19-year-old boyfriend had been drunk, they had quarrelled and Dahmer had come to take him home.

The police escorted them back to the apartment; it was neat and tidy, though it smelt unpleasant, and the officers joked with their dispatcher about reuniting the lovers.



The talented Mr Dahmer.

Dahmer murdered the boy promptly once he was back in his killing-room, and performed his usual ritual.

His 18th victim proved to be a more troublesome problem.

He had tried to handcuff Tracey Edwards, and the two struggled. Edwards managed to run away, but was stopped by police who assumed he had escaped from the authorities, with the handcuffs dangling from his wrist.

Describing what had happened, he led the police officers to the apartment.

Dahmer answered their questions calmly. He agreed to hand over the key to Edward's handcuffs.

An officer followed him into the bedroom, and as he glanced round the room saw photographs documenting various stages of Dahmer's murders.

The other officer was feeling nauseous with the stench in the apartment, despite the many sticks of incense burning.

The smell was worst near the refrigerator. As he was calling out to Dahmer in the bedroom for permission to open the refrigerator door, his partner came running in with Dahmer held in a neck lock, screaming and clawing.

Taken into custody he confessed to 15 murders, and pleaded not guilty by reason of insanity. He was sentenced to 15 consecutive life terms, 937 years in prison.

In jail he was a model prisoner devoted to religion; a born-again Christian.

This was to be his undoing. The warder allowed him to have contact with other inmates, and he was quickly attacked, and died of severe head trauma.

The log of items found inside Dahmer's apartment included:

1. A human head, and three bags of organs found in the refrigerator.
2. Three more heads, a torso and other internal organs inside a free-standing freezer.
3. Chemicals, formaldehyde, ether and chloroform.
4. A 57-gallon vat filled with acid and three decomposing torsos
5. Bleach used to whiten the skulls and bones.
6. A filing cabinet, containing most parts of a skeleton, a dried scalp, and thoughtfully notated descriptions of each victims photographs, in various stages of life and death.
7. A King James Bible, well thumbed.



How many ELECTRICIANS are KILLED by ELECTRICITY EVERY DAY?

Silhouetted against a clear sky a corpse dangles from a multitude of electric pylons like a limp fly caught in a giant web.

Elecrical engineers in particular risk life and limb on a daily basis in order to keep the machine of contemporary life purring, making it one of the most lethal jobs in the country – 1,019 deaths in the construction field alone over six years.

Manmade electrical danger aside, lightning is our world's most lethal natural force.

Each lightning bolt can stretch over five miles and contain over 100 million volts.

Contrary to popular belief, wearing rubber-soled shoes will not protect you, but talking on the phone during a storm can attract unwelcome attention from above.

The earth is hit by lightning over 100 times a day, and scientists believe that this may have played a part in evolution – the heat and chemical changes that it induces converts elements to compounds, the building blocks of organic life.

The effects of a lightning strike on a human are often fatal, causing cardiac arrests and internal burns.

Those who do survive are often left with a fern-like patter of red weals on their body; victims are noted to suffer post effects of insomnia, and even personality changes such as an inability



The fern-like pattern left on the skin of a lightning strike victim.

to concentrate, depression, irritability and difficulty socialising.

The discovery of the connection between electricity and the human body was a rich source of ghoulish fascination in the 1800s, when medical experiments and anatomical dissections were a popular diversion for the general public.

One such display apparently brought back a criminal's corpse from the dead, and inspired Mary Shelley's classic novel, *Frankenstein*.

The famous performance took place in 1803 at Newgate Prison, London and was performed by Giovanni Aldini, nephew of Luigi Galvani, a surgeon who had discovered that passing electricity through the body of a frog would cause its limbs to twitch and muscles to move.

Taking this peculiar scientific 'breakthrough' and turning it into a grisly circus act, Aldini used the body of murderer George Foster to demonstrate his uncle's discovery.

He inserted metal rods into Foster's mouth and ear and flooded the body with electricity. According to one eyewitness "the jaws of the deceased began to quiver... one eye actually opened... the right hand was raised and clenched, and the legs and thighs were set in motion".

The description above is an alarming one, given the persistent use of electroshock therapy around the world as a treatment for depression.

This form of psychological treatment was developed in the 1900s by inducing a seizure in the body of a patient.

ECT was given legendary status in films such as *One Flew Over the Cuckoo's Nest*, and in literature such as Sylvia Plath's *The Bell Jar*.

Her description makes compelling reading: "I shut my eyes. There was a brief silence, like an indrawn breath. Then something bent down and took hold of me and shook me like the end of the world. Whee-ee-ee-ee-ee, it shrilled, through an air crackling with blue light, and with each flash a great jolt drubbed me till I thought my bones would break and the sap fly out of me like a split plant."

Patients who have undergone the process describe the days after as passing in a haze, and many report ongoing memory loss.

Ernest Hemingway was treated with ECT for depression, and after many sessions was cast into such despair by the loss of his memory that he ended his life by shooting himself.

Vivian Leigh, star of *Gone with the Wind* was another patient of the treatment; her husband Laurence Olivier described her as an utterly changed woman after undergoing the electrical shocks, with observable personality differences.

Despite the adverse effects, and the fact that doctors still have no real idea as to how it works, 12,000 patients in the UK still undergo ECT each year in cases of severe depression.



Before Photoshop was invented, there was DALÍ.

Taken in 1948 this image memorably depicted gravity defeated, a moment in time plucked from a chaotic convergence of flying cats, water, chairs, paintings and the magnificent showman Salvador Dalí.

The image is in many ways a photographic rendering of Dalí's paintings, with their trademark melting watches, looming telephones, minaturized landscapes and women's bodies in various worrying states of disintegration.

Named *Dalí Atomicus*, this image was created by Austrian photographer Philippe Halsman, who collaborated with Dalí throughout the 1940s.

The apparent levitation of furniture was an effect created through using various 'invisible' supporting devices, but it took 28 attempts to get all the moving parts working in harmony.

Philippe Halsman had an extraordinary past – one fitting for a Dalí collaborator. He came to the USA by the way of France, having fled his native Austria after a curious hiking incident.

He and his father had set out walking in the Alps and during their trip his father died of severe head injuries after a fall.

Halsman was suspected of patricide and held, perhaps more as a result of being Jewish at a time when anti-semitism was flourishing.

He was supported in his appeal against the allegations by figures as influential as Albert Einstein and Thomas Mann. Fortuitously, Halsman was able to make his way to America and went on to capture Einstein in a miserablist portrait that

would eventually grace the cover of *Time* magazine to accompany their article on the father of relativity being named the 'Person of the Century'.

Dalí had his sights set very firmly on being a 'person of the century' and dedicated his life to achieving fame and notoriety. He was undeniably a virtuoso artist and certainly one of the most recognisable painters of the era. His eccentric moustache, bohemian dress, and bizarre lifestyle earned him acres of column inches and press photographs, but often obscured thoughtful analysis of his work.

As one of the founding members of the Surrealist movement in 1920s Paris, he was a flamboyant exponent of the surrealist manifesto; the liberation of the human spirit through a release of libidinal desires and suppressed emotion.

Whether Dalí was as strange a man as the persona he projected is moot, but he certainly had a number of eccentricities that put him just shy of mental aberration. Purportedly he had an intense fear of grasshoppers, was afraid to expose his feet, and always carried a piece of driftwood around to ward off evil spirits.

His wife Gala suited his strange lifestyle perfectly. She met Dalí in Spain having ended a three-way relationship with Max Ernst and her then husband Paul Eluard, both artists.

Gala's strong sex drive meant that she had many affairs during her marriage to Dalí, which he possibly encouraged given his practice of candaulism; a penchant for showing his naked partner to others for their voyeuristic pleasure.

André Breton, the leading light of the Surrealists, who largely formulated their approach to art and life, was profoundly influenced by his training in medicine and psychiatry.

He served in a neurological hospital during the Great War during which he had used Sigmund Freud's new methods of analysis on traumatised soldiers.

This interest in the powers of the subconscious led the Surrealists to a fascination with dream analysis; they saw it as

means to address ways to uncover thoughts that lie dormant in the mind, forced into submission by the strictures of civilised society.

Dreams were also highly prized by the group as expressions of hidden desires, irrational love and obsessions.

Dalí harnessed dream imagery in his work to create intensely evocative spaces or 'hand painted dream photographs' as he called them, that have delighted gallery goers, and tea towel buyers, the world over.

Dreams have proved a source of fascination for societies across the centuries.

In Ancient Rome dreams were brought to the Senate for discussion, and in Ancient Greece individuals would sleep in temples and holy sites in order to receive instructive dreams from the gods.

Dreams vary in length from a few seconds to 20 minutes or so, and contrary to belief we never spend more than a small portion of our sleep dreaming.

Humans are not alone in their nightly fantasy worlds; all mammals dream, as is clear to anyone who has ever observed a dog twitching and growling in its sleep. Dreaming patterns across the species vary, with dolphins experiencing minimal dreams, and possums and armadillos being the most prolific of dreamers.

Some experts believe dreams play an evolutionary role in preparing animals for future dangers, through playing out their fears in their sleep.

Dreams in humans can occasionally be oddly productive for the whole of society.

The scientist Dmitri Mendeleev had been working on a system to calculate the atomic elements that he felt would unlock the secrets of nature. One evening in 1869, exhausted from his labours he fell asleep in his study and dreamed of a perfect formation of the elements; upon waking he furiously scribbled them down.

Those scribbles became the Periodic Table that even today underpins modern chemistry.



A TRAIN ROBBER'S COFFIN, 1890, displayed as a DETERRENT to OTHERS by the RAILROAD OWNERS.

Rube Burrow was an infamous train hijacker and outlaw king; his epithet was the 'Alabama Robin Hood', as he was believed to never to have stolen from a poor man.

In his short but successful career Burrow robbed so many locomotives throughout America's Old West, that he was a highly-wanted man, both by railway Pinkerton detectives, and criminal rivals.

In his four year heyday between 1886–90, Burrow and his gang didn't make a single mistake – always boldly daring and successful in relieving their mobile targets of the money they were holding.

His first train robbery was made in broad daylight on the Ft. Worth–Denver Railroad in Bellevue, Texas; he took a small

sum, just $300. By his third robbery he had honed his skills and came away with around $30,000.

He quickly discovered that most expresses travelling along the South-West in the 1880s would be carrying crates of cash being transported to the Louisiana Lottery – perfect for looting.

The Louisiana Lottery was a private corporation, for a long time the only legitimate lottery in the U.S. Although it was legal, it had a reputation for being deeply corrupt, swindling the state and its citizens of their money.

Despite his manifold lawbreaking career Burrow wasn't a killer, and without taking lives he held celebrity status amongst highwaymen.

His signature move was to climb aboard the engine at night as it was pulling away from a station and, with the engineer at gunpoint, stop the express car on solid ground, leaving the passenger car stranded on a trestle bridge so travellers couldn't get in the way. One engineer on the Texas & Pacific Line is said to have once asked "Where should I stop this time?" to which Burrow replied, "Same place."

A Robin Hood tale spread about Burrow's encounter with an elderly widow, whose farm house he had stopped at to ask for food, a full day of robbing having built up his appetite.

While he was eating the fine meal his hostess had prepared, she told him about a $700 mortgage debt that was well overdue, that the banker was coming any minute to pursue it, and she couldn't afford to pay.

Burrow thanked her for his meal by giving her enough money to pay off the banker, telling her to be sure to get a receipt.

Then he waited in the nearby woods, and simply recovered his money from the banker after following him from the farmhouse.

In what was one of the most widespread manhunts in the West's history, Burrow was finally caught and held in an Alabama jail. He managed to escape prison with a hidden small Deringer pistol, but died in a gunfight later the same night. His body was tastefully

placed in a casket and displayed near the railway platform to deter other opportunist train thieves.

Admirers snipped off locks of his hair, and snatched buttons from his coat; his grave had to be monitored for some time after his burial as people were prone to chipping off pieces of his tombstone to keep as mementos.

In the Old West, lawmen were often as ruthless as the outlaws. Sheriff James 'Wild Bill' Hickok lived by his mantra "shoot first, ask questions later".

Usually drunk and something of a roughneck, he is remembered for ruling with an iron fist; his methods helped tame two of the most lawless towns on the frontier in Kansas.

Rumours abounded about his quick draw, his flawless marksmanship, and his romance with Martha 'Calamity' Jane. Admirers believed that he had once killed an attacking bear with his bare hands.

Hickok had also gathered many enemies, including those whose friends and family he had killed; he met a brutal end on 2nd August 1876 whilst playing poker in a saloon in Deadwood, South Dakota.

With Wild Bill sitting with his back to the door, former buffalo hunter 'Broken Nose' Jack McCall walked in, drew a pistol a few feet behind Hickok, yelling "Damn you! Take that!" as he fired a bullet into the back of Hickok's head.

McCall's motives were uncertain; he could have been hired to murder Hickok, or he could have been seeking revenge.

In a previous poker match, McCall had lost heavily to Hickok who humiliatingly tossed McCall a few cents, "enough for breakfast".

The incomplete hand of cards Wild Bill was holding as he was shot – a pair of black aces and a pair of black eights – have since been known as the 'Dead-Man's Hand'.

His legend lives on today – the top tourist draw in Deadwood is a re-enactment of the murder of Wild Bill Hickok and the trial and hanging of Jack McCall, taking place every night during the summer.

Meet the MANSONS.



Not only were the Manson ‘family’ a cult of psychopathic killers.

They were also poor spellers.

When they scrawled “Helter Skelter” in Sharon Tate’s blood on her bedroom wall after they butchered her, they spelt it “Healther Skelter”.

Helter Skelter was Charles Manson’s demented interpretation of a Beatles’ song lyric.

He built his following of oddball hippie believers by preaching the righteousness of an apocalyptic war he felt the lyrics foretold – and persuaded his Manson Family they were to spiritually lead it.

The grotesque murders of Tate and her three friends transfixed America and much of the world, and can be traced back to an unlikely encounter in Spring 1968.

Dennis Wilson, a founding member of the Beach Boys, met two hitchhikers, Patricia Krenwinkel and Ella Jo Bailey, liked them and invited both to come to his house in Los Angeles for a drink.

Returning home in the early hours the following morning, after a late recording session, he was greeted in the driveway of his home by Charles Manson, emerging from his front door.

Nervously, Wilson asked the spooky-looking stranger if he intended to hurt him. “Why, no” replied Manson, as he crouched low to kiss Wilson’s feet.

Inside the house, there were now 12 strangers, mainly women.

Over the next few months this number doubled, and Manson’s followers made themselves part of the household.

Wilson would sing and write songs with Manson, and the women would do their bidding.

Wilson paid for studio time for Manson to perform, and introduced Manson to friends in the entertainment business.

Finally however, the Beach Boy's manager managed to persuade 'the family' to leave, relocating them to a ranch, an old set for movie and TV westerns that had fallen into disrepair.

It was the Spahn Movie Ranch, which made a little money selling horseback rides.

Manson asked his family women to occasionally have sex with the nearly blind 80-year-old owner George Spahn, and Lynette 'Squeaky' Fromme obliged, and acted as his seeing-eye guide, in exchange for the group's rent.

She acquired the nickname because she squeaked when Spahn fondled her thigh.

Manson had been introduced to a number of the Beach Boys' acquaintances in the entertainment business, and they had expressed interest in hearing his music.

When one of them, a record producer, failed to show up for an appointment to hear the recordings, Manson was incensed and sent four family members to the producer's home and "totally destroy everyone in it, gruesome as you can".

Apparently Manson was unaware that the house had been rented to Sharon Tate and husband Roman Polanski.

Polanski was abroad filming that night, but Sharon Tate was home, and over 8 months pregnant. She and three friends visiting her were all slaughtered in a flurry of knife attacks, between 30 to 50 stab wounds per victim.

Manson's further instruction was to "leave a sign – something witchy". They scrawled messages in blood on doors and walls.

The four Manson members who took part were Charles 'Tex' Watson, Susan 'Sadie' Atkins, Linda Kasabian, and Patricia Krenwinkel.

The following night, as Manson's 'helter skelter' continued, they and two other two other members, Steve Grogan and Leslie Van Houten dropped in on a couple named LaBianca at their home.



The Manson ladies had their heads shaved before trial in solidarity with Manson, who had adopted the same look to declare himself 'the devil'. They also cut Xs into their foreheads, to co-ordinate with Manson's carved swastika.

This time Manson went with the six to show them "how to do it"; he explained he was disappointed by the sloppy manner of the previous night's murders.

Watson carved "WAR" on Leno LaBianca's abdomen, and left him with 14 puncture wounds from an ivory-handled two-tined carving fork which he left jutting out of his stomach. Krenwinkel wrote "Rise" and "Death to Pigs" on the walls. Manson had now left the LaBianca home, taken the car, leaving the other family members to hitchhike home, after instructing them on how to use a bayonette and kitchen knife to stab their victims numerous times.

LaBianca, a supermarket executive, and his wife, had the misfortune to live next door to a house in which Manson and family members had attended a party the previous year.

Charles 'Tex' Watson is currently serving a life prison sentence. Watson is a born-again Christian and ordained minister, and operates Love Ministries, a website dedicated to spreading God's word, and to apologising to his victims' family members. He wrote his autobiography *Will You Die For Me? The Man Who Killed For Charles Manson* in 1978, and has been denied parole 13 times.

Patricia Krenwinkel is currently serving a life sentence and was denied parole for the thirteenth time in 2011. Though she remained loyal to Manson throughout the trial and during her early period in prison, in recent years she has made strides to turn her life around. With a perfect prison record, Krenwinkel has earned a bachelor's degree in Human Services (?), has enrolled in Alcoholics Anonymous and Narcotics Anonymous programmes, and helps to teach illiterate inmates to read.

Susan 'Sadie Mae' Atkins died of brain cancer in 2009 at the age of 61, having served 40 years of her life sentence. She became a born-again Christian in 1974, and married her attorney, James W. Whitehouse, in 1987. Whitehouse, a Harvard graduate, defended Atkins in her 2000 and 2005 parole hearings.

Linda Kasabian witnessed the murder of Sharon Tate though claimed to have taken no part in the slayings; she gave crucial testimonies at the Manson trial and the Watson trial, but found putting her life back together a struggle. She had several minor run-ins with police over the years, including drug possession. She is currently living in Washington and is married, generally staying out of the spotlight, though she reappeared in 2009 in both a documentary about Manson, and an appearance on *Larry King Live*.

Leslie Van Houten is currently serving a life sentence; considered a model prisoner, she has studied for two degrees,

and helps other inmates with their drink and drug problems. She has been rejected for parole over 19 times.

Steve Grogan was considered mentally unbalanced and overcome by drugs overuse, and is the only family member originally given a life sentence to be released. He is now working as a home decorator.

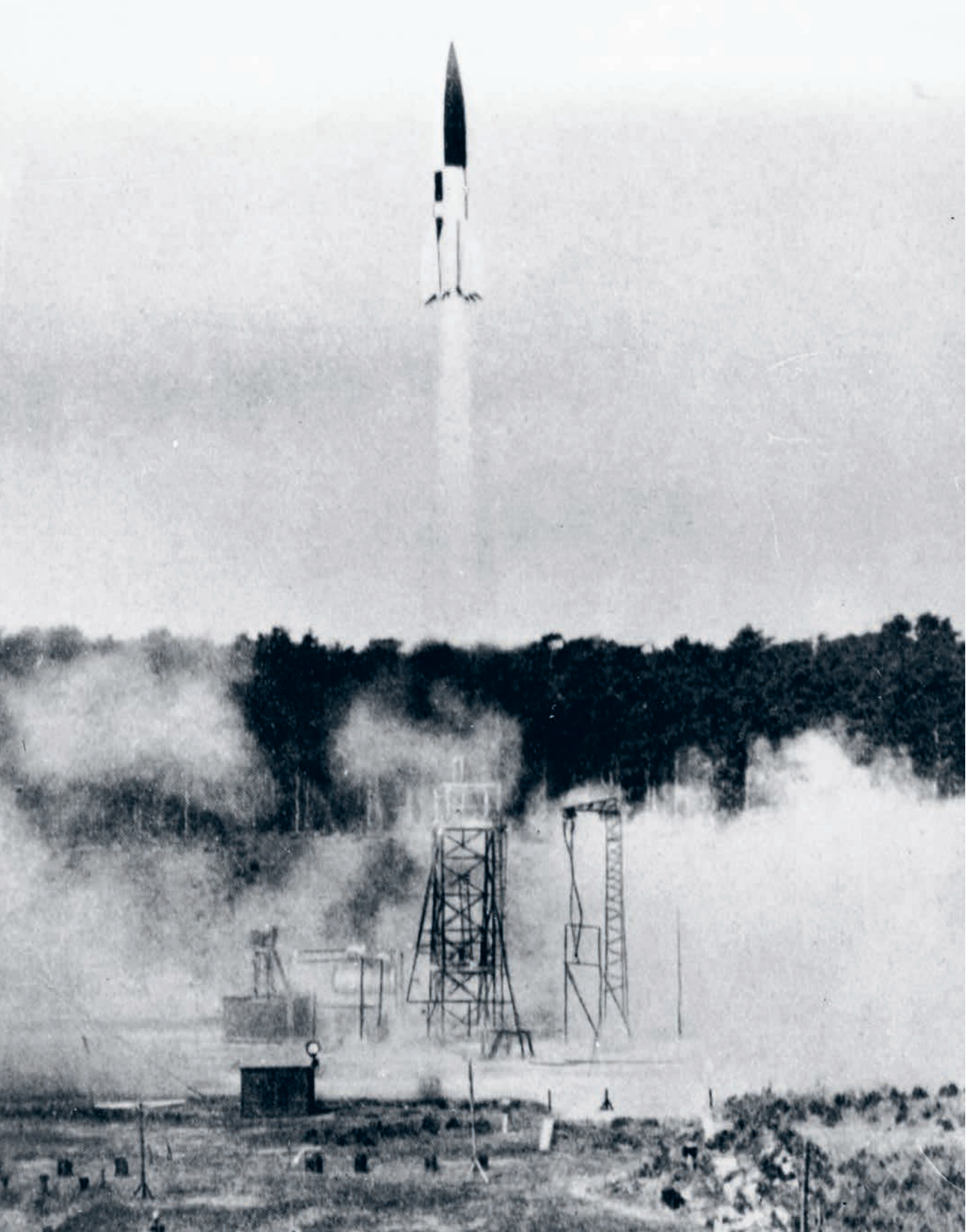
Charles Manson is serving life imprisonment in California. His death sentence was automatically commuted to life imprisonment in 1972, when a decision by the Supreme Court temporarily eliminated the state's death penalty.

The penalty has been reinstated, but bypassed Manson. He has been denied parole 12 times, and will next be eligible when he is 92 years old.

You may remember Lynette 'Squeaky' Fromme as the young family member who tried to assassinate President Gerald Ford in a botched shooting.

Given a life sentence, she attacked another inmate with a hammer, made an escape attempt but was captured. She was released from prison in August 2009.

Charles Manson's songs have been recorded by The Beach Boys, Guns 'n' Roses, and The Lemonheads.



After the WAR, WHO were the MOST WANTED NAZIS?

A German V2 rocket was launched in 1943. Two years later its scientists were top of the most hunted Nazis list – to be recruited for NASA.

Operation Paperclip was the Office of Strategic Services' (OSS) programme to grab as many of Germany's top scientific minds before the Russians could beat them to it.

So although President Truman specifically excluded anyone who was an official Nazi from being eligible, hundreds of rocket scientists, including Wernher von Braun, head of Nazi rocket attacks, were recruited despite being earlier classified as "a menace to the security of the Allied Forces".

Operation Paperclip expunged the public records of all the scientists' Nazi Party membership, and once 'bleached' of their Nazism, the U.S. Government granted them security clearance to work in the United States leading military facilities.

Paperclip, the project's operational name, derived from the paperclips used to attach the scientists new political personae to their 'U.S. Government Scientist' personnel file.

The Nazis, ever highly efficient, had produced the Osenberg List of their 4,000 most important technological specialists.

In March 1945, pieces of the list were found stuffed into a toilet in Bonn: it reached MI6, who pieced it together and passed it to U.S. intelligence.

More unpleasantly, Paperclip recruited scientists whose speciality was enhanced torture techniques and brainwashing; they were among the unsavoury members of the Master race who had been prosecuted as war criminals during the Nuremberg trials.

Several covert U.S. Government projects grew out of Operation Paperclip, including Project Chatter, Project Bluebird, Project Artichoke. Their purpose was to study mind control, interrogation, behavior modification and the like.

MKUltra was started by CIA Director Allen Dulles in 1953, with its remit to combat the fear of Soviet, Chinese and North Korean use of mind manipulation, techniques experienced by U.S. prisoners of war in Korea.

Don't blame me if this sounds like the plot of *The Manchurian Candidate* or *The Bourne Conspiracy*. They now begin to look like documentaries.



The Nuremberg Trials 1945–1946

Records of MKUltra, and one of its more interesting sub-projects, the U.S. Navy's 'Perfect Concussion' programme which favoured sub-aural frequency blasts to erase memory, were deliberately destroyed by the CIA in 1973, in what was apparently their own memory cleansing initiative.

There were more than 150 sub-programmes of MKUltra; academic research in chemical laboratories were being funded by grants from the CIA without recipients knowing their work was being used for this purpose.

One 1955 MKUltra document that was unearthed gives details of the sweep of its aims to take the lead in chemical, biological and radiological advances; vast funding was provided by undisclosed resources within the CIA:

1. Substances which will promote illogical thinking and impulsiveness to the point where the recipient would be discredited in public.

2. Substances which increase the efficiency of mentation and perception.

3. Materials which will cause the victim to age faster/slower in maturity.

4. Materials which will promote the intoxicating effect of alcohol.

5. Materials which will produce the signs and symptoms of recognised diseases in a reversible way so that they may be used for malingering, etc.

6. Materials will cause temporary/permanent brain damage and loss of memory.

7. Substances which will enhance the ability of individuals to withstand privation, torture and coercion during interrogation and so-called 'brain-washing'.

8. Materials and physical methods which will produce amnesia for events preceding and during their use.

9. Physical methods of producing shock and confusion over extended periods of time and capable of surreptitious use.

10. Substances which produce physical disablement such as paralysis of the legs, acute anaemia, etc.

11. Substances which will produce a chemical that can cause blisters.

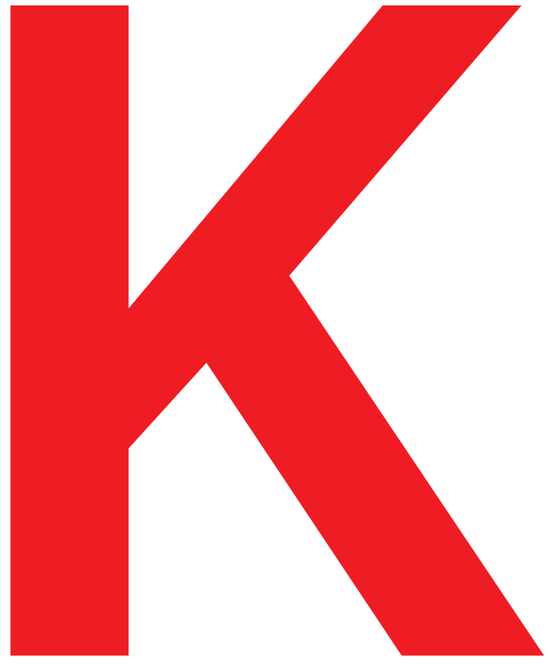
12. Substances which alter personality structure in such a way that the tendency of the recipient to become dependent upon another person is enhanced.

13. A material which will cause mental confusion of such a type that the individual under its influence will find it difficult to maintain a fabrication under questioning.

14. Substances which will lower the ambition and general working efficiency of men when administered in undetectable amounts.

15. Substances which promote weakness or distortion of the eyesight or hearing faculties, preferably without permanent effects.

It appears that Hollywood's conspiracy theories about the rogue years of the CIA may not be completely misplaced.





An ANT'S EYE-VIEW of the INSIDE of a VIOLIN.

Niccolò Paganini is considered by many to be the greatest violin virtuoso ever. In the 19th century, at the age of 22 he became a European superstar, excelling against his talented contemporaries in an era of many outstanding violinists.

Paganini's playing was particularly brilliant for several reasons, but the first was clearly genetic.

His overly long and dexterous fingers meant that he could play three octaves across four strings in just one hand span – a feat that remains unmatched and makes him the envy of every violin hopeful.

He was also renowned for mastering all the techniques of the greats before him, and for reviving lost techniques such as pizzicato (plucking), and use of soft, high pitch harmonics.

Paganini included the most complex of these into his compositions, known as some of the hardest pieces to play on the violin, notably the tricky *Caprice No. 24 in A minor*.

However, Paganini was as famous for scandal as he was for his genius.

At age 16 he had the kind of breakdown which often inflicts the abundantly talented, and in his tortured youth became a severe alcoholic and troublemaker, temporarily putting a stop to the budding prodigy's career.

An elderly and wealthy patroness took pity on the young delinquent and backed him, boosting him to secure a post as the first violin of the Republic of Lucca.

With his continuing tendency to binge drink, Paganini was never out of the spotlight because of his party lifestyle; a notorious gambler and womaniser, he fathered illegitimate children as regularly as contracting syphilis, and would have been a stalwart feature in celebrity magazines had they existed in his day.

But the secret of Paganini's success was finally perceived as more sinister than merely having remarkable fingers and skills.

When he was dying from a sudden internal haemorrhage, Paganini wouldn't allow a priest to perform his Last Rites and the Catholic Church subsequently denied him a burial in his native Genoa. This confirmed rumours which had been growing among the eager public – Paganini had sold his soul to the devil.

In the deeply conservative Catholic Italy of the day, people first suspected this was indeed the case as Paganini, already a very wiry, thin man with a delicate mental state, lost his bottom teeth and grew so emaciated his features appeared even more skull-like.

But daring Paganini was not afraid of a little Satanist publicity. When asked whether he had indeed sold his soul he responded "how else do you think I got to be able to play so well?"

He encouraged the rumours by deciding to dress only in black, and as his health suddenly worsened, giving strange, shaky performances.

And the likely cause of those lengthy flexible fingers and untimely death? Marfan's Syndrome.

People suffering with Marfan's often look perfectly well. In essence they appear to be blessed by being elegantly tall, with slender limbs. However, besides a very wide wing-span they often suffer from sunken chests and extreme short-sightedness.

The disease eventually attacks the organs and respiratory systems, and the majority of sufferers are not aware they have the syndrome until it is too late. A weakened heart becomes the primary cause of death, with an average lifespan of 32 years for undiagnosed individuals.

In recent years, sufferers can be quite easily treated, and Marfan's Syndrome needn't put a stop to a normal, even highly successful life, particularly for musicians and athletes.

Other historical figures suspected of having Marfan's include Abraham Lincoln, Russian composer Sergei Rachmaninoff, British monarch Mary Queen of Scots, and even Olympic swimmer Michael Phelps, whose lean body resulted in his being described as a freak of nature, and also led to rumours of early signs of the condition. Phelps continues to be tested yearly but for the time being is fit, well and Marfan's free.

All blues guitar aficionados revere Robert Johnson, the inspired musician who reputedly shared Paganini's fondness for the Devil, and was also a supposed Marfan's sufferer.

When Johnson first started pursuing his calling, friends said he was the worst guitarist they had ever heard. However, overnight Johnson's musical ability leapt forward quite magically – to the point where he became regarded as the greatest bluesman ever.

Though he enjoyed little commercial success during his lifetime, his legacy grows on as his songs are covered by the likes of Led Zeppelin, Eric Clapton, and every new generation of music stars.

Johnson's existence is based on 2 or 3 photographs, testimonies, and a handful of recordings. According to legend, Johnson met the Devil and his dog at a crossroads in Missisippi. He exchanged his soul with the devil's soulful old hound in return for mystical musical powers.

Though Johnson was granted his wish, and indeed his music was unlike anything heard before, he spent the rest of his life a lonely wanderer, romanticising this existence in his mournful and haunting melodies.

His demise was as tragic as his life; aged just 27, a lover's jealous husband poisoned his whiskey. Reports say that he was seen on all fours howling at the moon on the night that he died.

Before they transplanted A HUMAN HEART, they transplanted A DOG'S HEAD.

The Russian scientist and organ transplant pioneer Vladimir Demikhov died in relative obscurity in 1998.

He was awarded the Order of Merit for the Fatherland, third class, just before his death.

Dr Christiaan Barnard will always be remembered for performing the world's first heart transplant, but throughout his career he considered Demikhov his mentor, visiting his laboratory in Moscow in 1960 and 1963.

Demikhov's first two-headed dog was created by grafting the head, shoulders, and front two legs of a puppy onto the back of a mature German Shepherd. He displayed his creation to journalists, having the animals drink simultaneously from bowls of milk.

The Russian performed 22 of these operations, but each subject would only live a few weeks after tissue rejection took hold.

Demikhov's pioneering work may appear ghoulish, more Frankenstein than medicine, unless you happen to be dying, without a possibility of a replacement heart, or lung, or kidney.

Christiaan Barnard's first successful heart transplant in Cape Town became a global media carnival, but its recipient died after eighteen days. Barnard's second patient survived nineteen months.

In more recent years we have seen surgeons transplant hearts quite routinely, with an encouraging level of success, as well as lung transplants, hand transplants, and face transplants.

In 2008, a hospital in Germany hosted a double arm transplant,

and three years later Spanish doctors successfully conducted a double leg transplant.

Even more remarkable was the first baby to be born from a transplanted ovary, performed by Professor James Richardson.

Indeed much of the science that saves lives on a daily basis has come about as a result of extraordinary scientific experiments, conducted by doctors often seen as eccentric at best, or more often just callously inhumane.

Animals have suffered in the cause of scientific advance for centuries. The rate of using vertebrates such as dogs, monkeys, mice and rats has rocketed; in 2001 it is estimated that as many as 80 million rodents were used in the U.S. alone.

Fervent debate continues about the necessity for this level of vivisection, with the British Royal Society arguing that nearly every medical breakthrough in the last two centuries was made via animal testing in some way.

Protests began as early as 1655, when prominent scientist Edmund O'Meara said "the miserable torture places the animal's body in an unnatural state, hence the affects of pain on the animal being examined render the results of any research null and void".

The use of non-human primates is a contemporary cause for concern. Thousands of chimps are used in experiments every year, and euthanised after they have fulfilled their use.

It appears mankind still remains in an unfathomable quandary about the righteousness of saving human lives at the cost of brutally taking so many test-lab lives.

Clearly, we need to see all other creatures as sub-human, and of less consequence, to justify our actions.

Of course many scientists have sacrificed their own lives in the search for medical knowledge.

Marie Curie, who discovered the element radium, spent her entire life performing research on its possible applications in radiation therapy; the constant exposure to this mysterious substance led her to contract aplastic anaemia, a fatal condition

in which the bone marrow cannot produce white blood cells.

Another female pioneer was Elizabeth Ascheim who worked with her husband in the investigation of X-rays. They experimented with this new technology for years, regularly placing themselves in harm's way as subjects for the images. She died of a vicious form of cancer as a direct result of the over-exposure, alerting the world of medicine to the wonders the X-ray could offer, and the dangers that were lurking in the magic.

Less morbid, and more entertaining are the theories about Cellular Memory Syndrome.

Claire Sylvia received a heart and lung transplant in the 1970s from an 18-year-old male donor who had been in a motorcycle accident. The patient had no idea who had provided the organ, but after recovering from the operation she had an intense craving for beer and chicken nuggets, neither of which she had ever enjoyed prior to the surgery.

An even more mystifying example of Cellular Memory was found in an 8-year-old girl who received the heart of a 10-year-old girl. The recipient was haunted after the surgery with vivid nightmares about a vicious attacker and a girl being murdered. A psychiatrist examining the child found her dreams so detailed, he believed them to be authentic memories.

It transpired that the 10-year-old whose heart was donated had been murdered, and the recipient's violent, recurring nightmares described events so clearly, and the murderer so well, that police were able to soon arrest and convict the killer.

My favourite case, obviously, is that of William Sheridan from New York who was just recovering from a heart transplant when he inexplicably developed a passion for art, and started to make professional-quality paintings; he had never shown the slightest interest in art or art-making before his operation.

He later discovered that his organ donor had been a successful artist, and that his surgery would be considered the first ever art transplant.



A message to AL-QAEDA from the TWIN TOWERS.

Even to an atheist, this remarkable picture of the World Trade Centre is hauntingly moving.

But I remember being intrigued by reports of a robbery at the Bank of America branch, on the eleventh floor of one of the towers.

In 1998 low-level mobster Ralph Guarino decided it was time to move into a bigger league, and mastermind an audacious bank hold-up.

A friend of his, Salvatore Calciano, had worked at the World Trade Centre for 20 years.

They discussed the camera surveillance everywhere in the Twin Towers; after a 1993 bombing, non-stop sweeps of every floor, elevator, car park, corridor, were monitored around the clock.

Calciano also told Guarino about a Brinks security van that arrived each day to deliver cash to the Bank of America branch on the eleventh floor of the first tower.

At 8:30am the truck would arrive at the garage, guards would place eight to ten bags of cash into steel rolling carts, and deliver them up to the bank, and into its vault.

Guarino decided that a team of three men should wait in a car by the elevator for the Brinks truck to arrive, place ski masks over

their heads, and brandishing guns, follow the unarmed guards into the elevator, after it had been filled with the carts of cash.

Each of the gang would bring two duffel bags, and stuff them with banknotes once inside the elevator. The guards would be tied up, and the three of them would take the elevator up a couple of floors, and walk out of the front door, carrying fake IDs if they happened to be challenged.

They would be careful to avoid prying cameras by keeping their heads down, faces shielded from clear view.

All went according to plan, except that two of the guards were in fact armed, but were taken by surprise and quickly handcuffed.

Guarino, watching from a parked car, saw the three leave via the building's front door at 8:45am, duffel bags full.

But soon after the robbery, media were excitedly covering the story, with pictures of shadowy but recognisable images of the robbers. They had not taken enough care to avoid the gaze of all the cameras.

Guarino feared the worst, and sure enough when two of the robbers returned to their neighbourhoods, many locals were chasing the $26,000 reward that was being offered, and identified them to the police with vigour. Both were promptly arrested.

The third was spotted on an Amtrak train, chain smoking nervously, and fellow passengers could see this odd-acting man fondling large bundles of cash.

Police were waiting for him when the train stopped.

Although the FBI now had all three in custody, they determined that none of them was intelligent enough to manage a bank-raid of this magnitude, and began searching for the criminal brains behind it.

But both Guarino and his insider Calciano had their own problems.

In anticipation of receiving a big payday, they had each already racked up loans of $50,000 and Guarino was in difficulty because his debt was to a member of the Gambino crime family.

Mobsters all over New York believed that little Guarino had all the money taken from the bank haul, and were thinking of ways to get hold some of it.

Word about Guarino filtered down from police informants, and he was arrested at his Staten Island home and taken to FBI headquarters in New York.

To evade a long prison term, he agreed to work undercover for his new masters, wearing a listening device, and recording conversations between mob soldiers.

He continued his spy work for the FBI for 10 years, enabling them to gain enough material to charge twenty senior mobsters with racketeering, seven murders, 14 murder conspiracies, extortion in the construction industry, and widespread fraud.

Between 1999–2005, 45 members of the DeCavalcante family, one of New York's five ruling mob dynasties, were imprisoned.

During Guarino's time as an informer, fellow mobster Joseph Masella was gunned down on the orders of crime boss Vincent Palermo.

This led to more widespread arrests, and a rush by almost everyone charged to offer evidence against others in exchange for a more lenient sentence.

The DeCavalcante family, on whom the *Sopranos* TV series was based, was now so severely weakened, the remaining Mafia dons found themselves sharing out the DeCavalante operations in New Jersey, with one less family to feed.



Our FIRST PEEK inside.

In 1883 Lord Kelvin, President of the Royal Society, declared that “X-rays will prove to be a hoax”; this was the general academic response to early research made into the revolutionary technology.

Then, this image was presented to a mystified scientific world in 1895, and was quickly reprinted on the front pages of newspapers and journals across the world. It shows the ghostly inner world of the ringed hand of Anna Röntgen, wife of Wilhelm Conrad Röntgen, credited with being inventor of the X-ray.

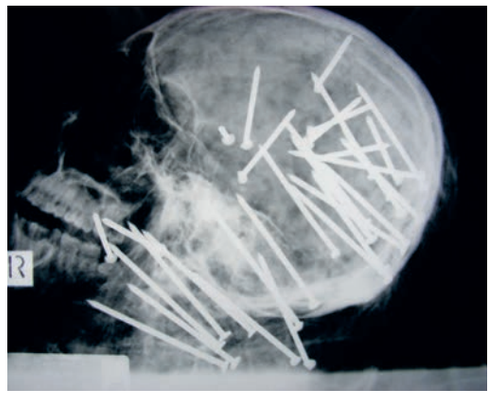
The path to the discovery is difficult to trace as Röntgen had all of his lab notes destroyed when he died, but biographers point to the discovery as being an accident – one that came about as a result of his work with cathode tubes. During an experiment he noticed a greenish glow projected beyond the screen he was using, and then passed through a sheet of cardboard; excitedly he found that this glow could also permeate through papers and books in his study. He referred to the rays he detected as ‘X’, or unknown, and the name stuck.

When shown the image of her hand his wife exclaimed “I have seen my death”; this proved a fitting testament for the discovery, which in its early days took the lives of a number of scientists poisoned by multiple exposure to the radiation, including Anna Röntgen herself.

Thomas Edison was inspired by the technology and developed the standard for medical use of X-rays.

One of his laboratory technicians lost both arms, amputated after habitually testing X-rays on his hands. The cancerous tumors that resulted were vicious, and the first hint that radiation was a life threatening force.

The dangers posed to the scientists who pioneered X-ray technology was considerable, but their sacrifice was an invaluable



34 nails from a nail gun were found lodged in the head of a murdered 27-year-old Chinese man during a post-mortem examination. Chen Liu's remains were recovered from marshland in south Sydney in 2009.

gift to mankind; the X-ray revolutionised the treatment of broken limbs, and more crucially, internal examination, developing into a key treatment in the fight against cancer – radiotherapy.

As with any scientific discovery there are often far more uses for it than its inventor could ever have envisaged.

Fluroscopes were once popular in shoe stores across Europe and the USA. These boxed constructions allowed you to slip your newly-shod feet inside, where you could stare down into the X-ray image of your foot inside the shoe. Shop assistants could then divine just how well your shoes fitted. As the dangers of radiation became better documented the machines were withdrawn.

Art historians and restorers have made remarkable use of X-rays, using the fluorescent qualities of the X-ray to reveal hidden paintings that lurk under the surface of famous images, with white lead-based paints becoming especially visible.

In 2011 this technology enabled the Rijksmuseum in Amsterdam to discover a hidden unfinished Goya painting beneath his *Portrait of Don Ramón Satué* (1823).

Analysts at the museum believe that the figure revealed is Joseph Bonaparte, brother of Napoleon, who was briefly King of Spain from 1808–1813. The political climate had changed so rapidly that this ornate portrait was painted-over by Goya, keen to distance himself from any connection to the ousted French high command.

Similar discoveries have been made at galleries across the world. In January 2013 the National Portrait Gallery, London, could clearly see an image of the Virgin and Child underneath a portrait of Queen Elizabeth I's most loyal and trusted servant, Sir Francis Walsingham.

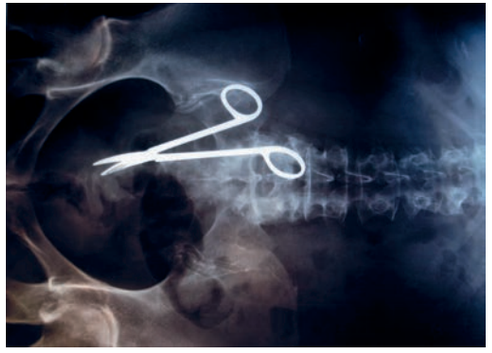
The discovery would have perplexed Sir Francis, who was at the helm of the Protestant push against the Catholic church, and the outright persecution of Catholics in England.

Whilst X-rays allow us to peek into the inner workings of our bodies, they have also been able to create a picture of the universe around us.

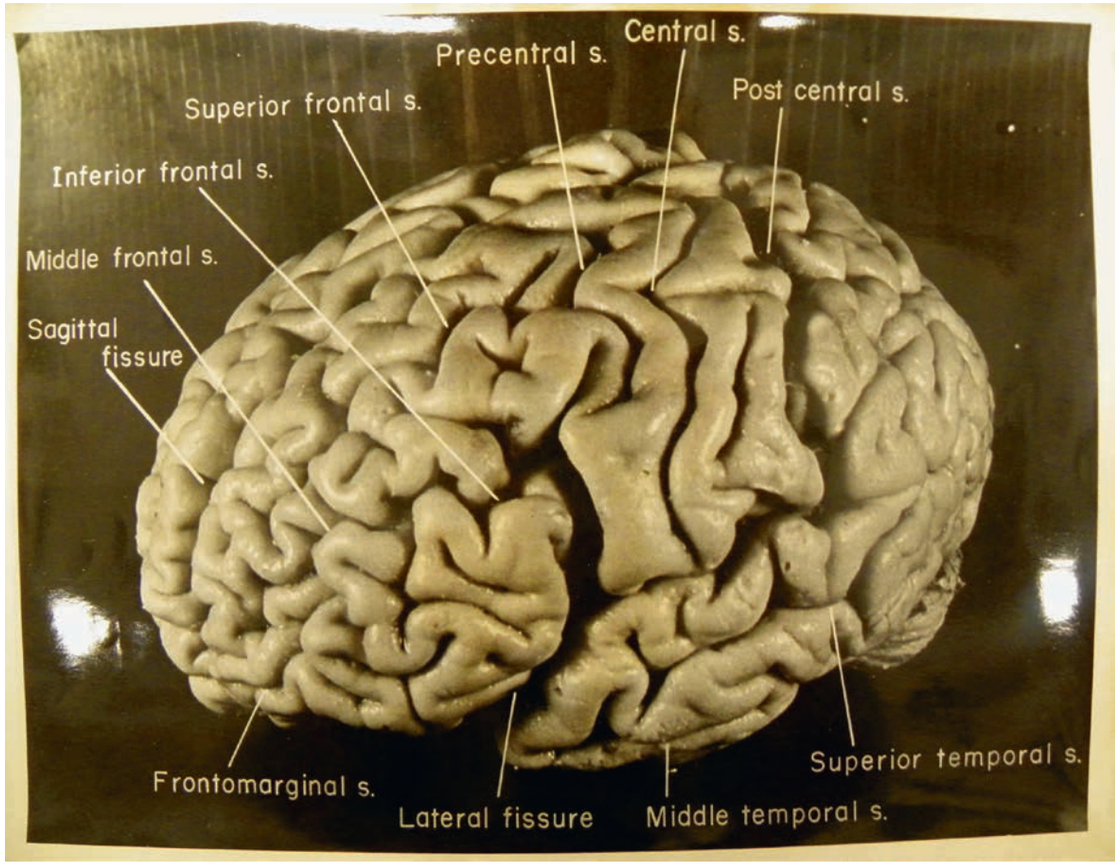
NASA's Chandra X-Ray Observatory was launched in 1999 to take its place in the fleet of research vehicles that circle the globe, and it has yielded vital information contributing to the study of dark matter and dark energy. Chandra is designed to detect X-ray emissions from the hottest regions of the universe, around black holes and exploded stars.

Chandra has also discovered a giant of a planet, rather baldly named CoRoT-2b, being consumed by its own star. Scientists have calculated that radiation from this 'death star' is "evaporating five million tons of matter from the planet every second".

Another X-ray satellite, run by the German Aerospace Centre is called ROSAT, after Röntgensatellit; in Germany X-rays are called Röntgenstrahlen, in memory and honour of Wilhelm Röntgen.



Pat Skinner had part of her colon removed at Sydney's St. George Hospital in May 2001, but continued to suffer intense pain in her abdomen for months after the operation. Eventually, she demanded doctors X-ray her abdomen. They discovered the 6.7-inch pair of scissors which had been left inside her after the surgery.



Einstein's BRAIN was SMALLER than MINE, and YOURS.

During Albert Einstein's autopsy, the pathologist removed the physicist's brain and preserved it in formalin.

He then took dozens of black and white photographs of it before it was cut up into 240 blocks.

After taking tissue samples from each block, he mounted them onto microscope slides and distributed the slides to some of the world's best neuropathologists.

The autopsy revealed that Einstein's brain was far smaller than average and subsequent studies showed all the changes that normally occur with ageing. Nothing more was analysed, however.

Harvey stored the brain fragments in a formalin-filled jar in a cider box kept under a beer cooler in his office.

Decades later, several researchers asked Harvey for some samples, and noticed some unusual features when examining them.

A study done in 1985 showed that two parts of his brain contained an unusually large number of non-neuronal cells, called glia.

Anthropologists obtained 12 of Harvey's original photographs from the National Museum of Health and Medicine, and found many that were taken from unusual angles, and showed structures that were not visible in photos evaluated previously.

They noted a uniquely formed prefrontal cortex, and concluded this would explain the kind of abstract thinking that Einstein would have needed for his experiments on the nature of space and time, such as imagining riding alongside a beam of light.



Young Einstein.

The unusually complex pattern of convolutions they saw gave the region an unusually large surface area, which they felt were a key contribution to his genius.

However Einstein's abilities did not always make themselves clear

As a child, he struggled to speak, and his worried parents took him to see doctors who misread his lack of interest in talking as a sign of someone of below average intelligence.

He also displayed stunted social development, was stubborn, and preferred to play alone.

At supper when he was around 5 years old he surprised his parents by breaking his silence to exclaim in perfect German "This soup is too hot!" His parents asked why he had never uttered a word before, and he replied "Because up to now everything was in order."

Many exceptionally intelligent people have displayed similar slow development at a young age, causing social theorist Thomas Sowell to name the behaviour Einstein's Syndrome.

Many children diagnosed in this way go on to achieve greatness in mathematics, music, and science, but can be wrongly considered autistic due to the similarity of the symptoms.

It wasn't just Einstein's brain that had been pickled and picked apart since his death; his eyes were also taken by his doctor and given to his optician where they remain locked away in a safe deposit box in New York City.

Even in death Einstein has been prolific. He is one of the top 10 highest earning dead people, and generates annual revenues of $20m.

The official beneficiary of his estate is the Hebrew University of Jerusalem, which promotes Einstein posthumously, spreading his teaching through educational material, including Disney's *Little Einsteins*.

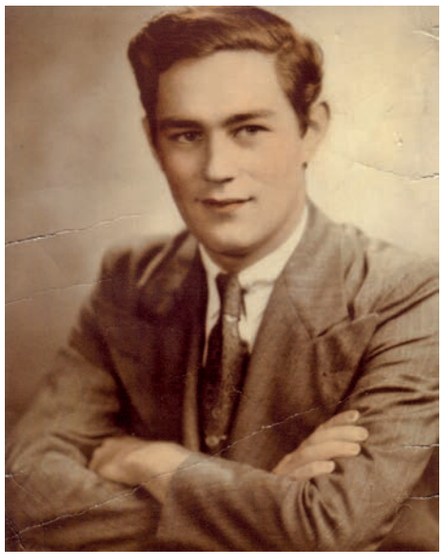
Also on the list of large scale money-makers, who despite being dead provide their trusts with a reliable fortune each year, are children's author Dr Seuss, Andy Warhol, John Lennon, Marilyn Monroe, and Elvis Presley, who is king of the dead millionaires, as well as Rock 'n' Roll, generating $52m per year.

The most significant brain in the world is Henry Molaison's, known in all scientific documentation only as HM.

HM was not an Einstein in intellectual prowess, but his brain has provided the most important case study of memory in scientific history.



At seventeen Einstein was studying for his teaching diploma in Physics and Mathematics at The Swiss Polytechnic in Zurich.



Henry Molaison, owner of the world's most important brain.

Molaison was born in 1926 in Connecticut and was an ordinary boy until he was 7 years old, when he crashed his bicycle, hitting his head hard, and as a result suffered from severe epileptic seizures for the rest of his adolescence.

Doctors and scientists at the time had no way of understanding why the boy had developed these fits, or if the blow to his head even had anything to do with it.

Molaison lived with his severe epilepsy until his late twenties, when he was blacking-out and having convulsions so frequently that he could no longer work.

He sought treatment from Dr William Scoville, a local neurosurgeon, who localised Molaison's epilepsy to the left and right medial temporal lobes in his brain, which appeared entirely non-functional.

In a move which was highly experimental for the time, Dr Scoville removed two finger-shaped slithers from this section of Molaison's brain.

Whilst the surgery was successful in its primary aim – to cure epilepsy – Molaison lost the ability to form any new semantic knowledge or memories; he suffered from retrograde amnesia, where even existing memories disappear, from the most recent back to the earliest.

His motor skills continued, and he was able to learn new ones.

However, as he couldn't remember learning them, he must have felt he was a 'natural' at every new skill he turned his hand to.

He lived 'in the moment' in the truest sense of the expression, as each day was completely separate from the one before, a true amnesiac.

People have said of Molaison that he died at 27 on the operating table although he lived until 82.

For the rest of his life he was studied closely by psychologists and scientists, each of whom worked for many years with him, and while he was always compliant in their questions and tests, he greeted them as if for the first time on every meeting.

Scientists consider Molaison's brain of such vital importance because it has taught us so much of what we know about memory.

The operation on his brain proved that memory ability is localised in a tiny area; previously it was believed the whole brain was engaged when making and storing memories.

Though he was monitored for the rest of his life Molaison was by no means mentally impaired in any other way.

He had above average IQ and enjoyed doing crossword puzzles though his life was spent doing menial tasks like fetching groceries and mowing the lawn; while he couldn't remember in the afternoon if he had had lunch, he appeared completely happy, never despondent or frustrated by his dependency.

Molaison wanted his brain to help other people after he died; it was dissected into 2,000 slices and digitised as a three-dimensional map by the Brain Observatory.

Dr Scoville never performed the operation again.



IN the BELLY of the BEAST.

Whaling has been a tradition since ancient man first fashioned a harpoon.

Though the early days of whale fishing had little effect on the ecosystem, the whale oil boom and advanced whaling techniques of the 19th century created a spiralling impact on the ocean food chain and whale populations.

What is it about whales that make them so appealing to hunters? Inuit civilizations have always depended on whales for everything from food to basket weaving, but for many years the West also made use of every part of a whale's anatomy.

Whales were primarily hunted for their oil, found mainly in the spermaceti organ in their brains, large sacks of oil used to generate sound.

In one sperm whale 500 gallons of spermaceti can be harvested. Whale oil was the crude oil of its day, highly desirable as a fuel for lamps as it burns cleanly and odorlessly, and its high viscosity meaning it remains liquid even at temperatures below freezing. Whale oil was also used for candles, dressing leather and fabrics, lubricants, cosmetics, soap, medical ointments, and margarine.

The rest of the whale did not go to waste. Ambergris, the dry, faecal smelling matter found in a whale's digestive system, was surprisingly used as a fixative in perfume. After maturing, ambergris loses its pungent odour and becomes quite sweet, making perfume last longer.

Baleen, the hair-like fibres used to filter food in the whale's mouth, was used for corsets, collar stiffeners, and parasol ribs.

The blubber found underneath the skin is still particularly vital. It is a key part of an Inuit diet, providing crucial vitamin D and omega-3 fatty acids.

Living in sub zero conditions where sun exposure is limited, and no vegetables can grow, means that without whale and seal blubber inhabitants would develop illnesses such as rickets. The benefits of a blubber-heavy diet are clear: Inuits do not suffer from cardiovascular diseases, and a 70-year-old Inuit has arteries as elastic as a typical Western 20-year-old.

Whaling was brought to a worldwide halt in 1986, with their numbers down to a few hundred thousand, and rebuilding the whale population is a slow process.

However, other than Inuits, some countries enjoy eating whale as a delicacy. The Japanese claim that whale meat has important nutritious values, such as being rich in protein and low in calories. Somehow whale meat still manages to turn up in high-end restaurants in Tokyo, where a meal of prime cuts can set you back many thousand Yen.

Though Japan claims whaling is now minimal (in the 1960s the Japanese killed more than 20,000 whales annually), the pressure from the whaling industry to continue the profitable business is cause for concern.

Puzzlingly, a campaign continues on animal rights website PETA entitled Eat the Whales; PETA argue that if humans simply can't abandon their habit of eating meat, instead of livestock they should eat whale instead.

By switching to super nutritious whale, Britain could save 20 billion other animals a year – cattle, lambs, chickens, pigs etc. Their argument is prosaic; one whale suffers for the benefit of 1,200 pigs.

When whales are allowed to die naturally, they often wash up on to beaches in various states of decay. People don't seem to know what to do with a beached whale, and have gone to various lengths to get rid of whale carcasses which are unsuitable for eating.



Blackgang Chine in the Isle of White opened in 1842 as a scenic curiosity, with its main attraction being a whale skeleton which had been washed up at Totland Bay. For many years it was used as a shopping bazaar.

Inevitably, they simply explode them.

In 1970, a 45ft long sperm whale ended up on an Oregon beach. After lengthy discussions with the U.S. Navy, officials decided to load the carcass with half a ton of dynamite, in the hope that it would be smashed into tiny enough pieces that scavenging fish and birds would come and clear everything up.

Unfortunately the amount of dynamite had been wrongly estimated, and the crowd who had turned out to watch the whale explosion were showered in heavy chunks of rotting blubber covering over 800 feet.

One spectator's brand new car was completely flattened by falling blubber. Charmingly, he had just bought the Ninety-Eight Regency during the 'Get a whale of a deal' promotion.

Dynamite is still the most common method to dispose of dead whales, but now they are hauled miles out to sea before being detonated.

However, dead whales can surprise you by exploding before the dynamite fuse has even been lit.

In 2004 in Tainan City, Taiwan, a 56ft dead sperm whale strapped to a cargo lorry was being driven down a busy street from a university laboratory to the Sutsao Wild Life Reservation Area where it was to undergo a full study; then it suddenly erupted, covering cars, shops and pedestrians in rotting, and foul smelling whale juice and entrails.

The build up of gas inside the decomposing whale had caused it to blow. Enough of the whale survived for researchers to perform their necropsy on it, and some preserved organs and tissues are on display in the Taijiang Cetacean Museum. The museum's most popular attraction? The whale's 5 foot penis.

In many ways whales are more evolved than man.

They are 'voluntary breathers', meaning that unlike us they keep half of their brain awake at all times. When they are asleep they are still consciously alert for predators.

They are the least sleep-dependent of mammals, napping for short bursts throughout the day. When whales sleep they huddle together and rest vertically, very close to the surface of the water.

Whale milk is 50% fat, over 10 times the fat content of human milk, and has the texture of toothpaste; this probably explains how whale calves gain strength and weight remarkably quickly.

And it is a myth that whales simply eat plankton.

The giant squid makes up 70% of a sperm whale's diet, but they don't make easy catching. Growing up to 14 metres in length, these massive squid look and sound like a throwback to prehistoric times.

Sperm whales have developed several hunting techniques, utilising their impressive size and voice. Scientists believe that they use sonar in the deep sea, like bats, emitting clicking noises

which bounce off obstacles and relay information to the whale about the size and location of their prey.

Marine biologists also believe that they use their spermaceti organ (the oily part of their brain so coveted by early hunters) as an amplifier to produce a loud sonic blast, stunning the squid and enabling the whale to swallow it whole.

But whales have learnt to be wary. Giant squid are in possession of the largest eyes known on any creature of Earth – 27cm in diameter, about the same as a basketball, with built in headlights. Their eyes help them to evade their whale predators, who, by comparison, have modest eyeballs.

When a battle ensues neither party comes out unscathed. Whales are usually victorious but are found to have many circular sucker scars gauged into their skin, and deep rips from the squid's sharp hooks.

Whilst little is known about the biggest squids, most information that has been gathered is based on what is recovered from the inside of a whale's stomach post mortem – namely many of their sharp beaks.

Did you read about a biblical, but more recent, tale about a whale?

James Bartley was a British skipper in the late 19th century. During a whaling expedition off the Falkland Islands aboard *The Star of the East*, Bartley was flung from the boat when the whale they were hunting turned the tables and suddenly attacked.

Bartley's crew members thought he must have perished, and continued their mission. They finally succeeded in capturing the whale, and started stripping the whale of its flesh. They were surprised to find Bartley alive inside the whale's stomach, where he had been for the past 15 hours.

It is believed that for the rest of his life his skin was bleached bright white by the whales' gastric juices, and he was made blind. His tombstone in Ireland reads "James Bartley – a modern day Jonah."



In ICY CONDITIONS, ICY DETACHMENT.

In 1961, Leonid Rogozov, 27, was the only doctor on a Soviet Antarctic expedition. He developed a severe pain in his stomach and a high fever.

Rogozov examined himself and discovered his appendix was so inflamed it could burst at any time.

Using a local anaesthetic, he operated to remove the appendix with an engineer and a meteorologist assisting the surgery. Rogozov performed the operation leaning back and using a hand mirror to get a better look at his enlarged insides.

He conducted the whole procedure in about 2 hours, stopping as nausea gripped him, and to inject antibiotics into the peritoneal cavity. Within five days Rogozov had recovered, and he returned to his regular duties after a week.

Rogozov's case is one of a surprisingly large number of people who have performed self-surgeries, doctors and civilians alike; sometimes in desperate need like Rogozov, and sometimes out of personal choice.

One of his pioneering predecessors was American surgeon Evan O'Neill Kane. When he was waiting to have his appendix removed in February 1921 at the age of 60, Kane had an inspiration. "Everyone, this one is mine."

Medical staff were baffled, but as Kane was the chief surgeon of the hospital, they had no option but to reluctantly draw back and start handing him the necessary tools.

Keen to test his own surgical ability and to experience what a patient went through when under his knife, Kane began to

perform the surgery he had previously completed nearly 4,000 times.

While his staff stood by, feeling nervously uneasy, Kane sliced himself open and completed the process in a mere 30 minutes. He paused only when he leant a little too far forward causing part of his intestine to pop out, which he nonchalantly placed back in.

Fourteen days later he was back at work.

This was not Kane's only self-surgery. He had previously amputated a finger which had become infected, and several years after his problematic appendix, he performed a hernia operation on himself, this time complete with camera crew.

This proved one self-surgery too far for the now much older man, who never fully regained his strength, and died three months later.

Kane, rather strangely, had a trademark sign-off at the end of every surgery – he tattooed the letter K in Morse code (– · –) onto his patients using India ink, branding them as a patient of his.

Boston Corbett achieved fame by being the man to shoot dead Abraham Lincoln's assassin John Wilkes Booth, but he was also notorious for dabbling in self-surgery.

Corbett was born Thomas Corbett, a Londoner who immigrated to New York where he worked as a hat maker before joining the army.

Exposure to the mercury used in the hat trade is said to have contributed to Corbett's strange behaviour in later life; one day after his wife died, he moved to Boston, changed his first name to Boston, decided he'd like to recreate his image in the likeness of Jesus, grew his hair long, castrated himself with a pair of scissors to "avoid the temptation of prostitutes", then went out for a meal.

Consequently, exposure to mercury resulting in odd behaviour like Corbett's was the root of the expression 'as mad as a hatter'.

Though his mental instability may have inspired him to assassinate Booth, Corbett still received the reward for killing him: $1,653.84.

One of the earliest forms of surgery is trepanning, the process of drilling a round hole through the skull to allow the brain some breathing space.

Trepanning traces back to the Iron Age; one ancient burial site in France was recently unearthed, dating back to 6,500 BC and 40 out of 120 skulls had trepanation holes.

Some of these display signs of the bone trying to heal, suggesting that the patients survived after this ordeal. The practice went out of favour with the onset of Christianity in Europe, but remained popular in Pagan cultures across the globe.

Trepanning is widely considered today to be a pseudoscience, but it is still believed by a few to cure a disparate array of maladies.

Originally the answer for epilepsy and mental disorders, trepanning advocates today take a more psychoanalytical view.



Still from Feilding's film *Heartbeat in the Brain*, 1970.

One self-trepanner who reached critical acclaim of sorts is Amanda Feilding. An English Countess who is an artist, drug policy reformer and scientist, Feilding suffered for much of her life with a condition that left her feeling exhausted most of the time.

Having met a trepanning advocate in the 1960s Feilding was convinced that this would be her cure, but despite pleading with many doctors she couldn't find anyone willing to perform the surgery.

So Feilding, at the age of 27, decided to take matters into her own hands. Using a foot-operated dentist's drill, cutting her fringe short and taping over her eyes to protect them from her blood, Feilding succeeded in drilling a hole through her skull.

The whole process was filmed for an art-house science fiction thriller *Heartbeat in the Brain*; gory in the extreme, Feilding looks calm as blood dribbles over her face.

A few hours after the surgery, Feilding claimed she felt more energised and fresh than she had in her whole life.

She spent that evening enjoying a very rare steak in a smart restaurant and went on to a party.

Feilding ran for Parliament twice on the platform 'Trepanation for the National Health', trying and raise awareness for the potential benefits of trepanning.

Though she received few votes at each election, she continues her work to make us 'trepanation-aware' through her organisation, the Trepanation Trust.





The TOKYO SUBWAY on AUGUST 20, 1977, and EVERY DAY SINCE.

Many of London's commuters believe the Tube was designed and built in order to torment the citizens of the city.

Slow, crowded, dirty, liable to breakdowns, infrequently serviced, subject to weekend closures, and infuriating to a 24-hour population – services largely come to an end shortly after midnight.

But despite the Tube having frustrated Londoners for decades, and however irritating the daily commute can be on our ageing subterranean behemoth, we would do well to remember that other cities would find our underground a miracle of comfort and tranquility.

Tokyo's subway is the world's most used metro. It annually transports 3.2 billion people through its networks, 8.7 million passengers daily. London's creaking system is comparatively underused, with a mere 1.2 billion being carried each year.

Tokyo offers 274 stations, and 13 lines, and is quick and efficient. However the overcrowding during peak rush hour times is bewildering.

Indeed the demand is so overwhelming that the companies who own the subway systems have to employ pushers, or 'oshiya'. These immaculately dressed men and women firmly pack their cargo of commuters into the boxy cars that populate the Tokyo underground, using their elegant white gloved hands to manhandle as many as possible into the mobile sardine cans.

A more positive innovation for Tokyo's subway are the piezoelectric floors at stations; this invention harnesses the

kinetic energy generated by commuters walking across it into electricity.

Currently, excuse pun, this insanely expensive innovation may only produce enough power to work gates and light the signage of the station, but it's a step in the right direction, excuse pun.

Widely renowned as the politest nation on earth, the cruelly cramped conditions can transform even the mildest mannered Japanese into a Ninja firebrand.

In May 2012 the humidity and discomfort escalated when one disgruntled man stabbed another at the Shibuya Fukutoshin subway station, when the crowds on the platform lost control of their zen calm.

Stabbings aside, groping has also become a major problem on the overcrowded subway – one survey conducted in two Tokyo high schools found that 70% of its female students had been touched-up whilst commuting.

Lecherous men with wandering hands go by the name of 'chikan'; in order to try and resolve the issue the government has set aside women-only carriages.



Modern day Tokyo subway commuter in a typically crowded carriage.

The most destructive violence to have taken place on the Tokyo subway, and indeed the gravest attack have occured on Japanese soil since World War II was the coordinated Sarin gas attacks in 1995.

The perpetrators, members of the doomsday group Aum Shinrikyo, released deadly Sarin onto several lines of the metro, killing thirteen people and effecting the vision of thousands of others.

Police investigations into the group's actions concluded that they had wanted to hasten the apocalypse and to install their leader, Shoko Asahara, as Emperor.

I am however continually intrigued by our own subway, the oldest and longest underground system in the world, running since 1863.

The first escalator was installed in 1911 at Earl's Court; to demonstrate its safety to a nervous public, their introduction to this spectacle confirmed it as utterly reliable. It was a widely attended demonstration by a one-legged man.

The inhabitant that seems to enjoy our tube network most is the mouse – there are an estimated half a million of them living in each of the tunnels.

Mice like the Tube; it is one of the most unhygienic places in London.

When a team of scientists took out a row of Central Line seats for analysis, they reported that the surface of the seats carried 4 types of hair (human, mouse, rat and dog), 7 types of insect (mostly fleas), vomit from 9 different people, urine from 4 different people, human excrement, rodent excrement and human semen.

When they took the seats themselves apart, they found the remains of 6 mice, 2 large rats and a previously unheard of strain of fungus.

The choice is yours: the horrors of being stuffed into a fug of commuters fighting for air in the Tokyo subway, or actually getting a seat on the London tube, and sharing it with its previous inhabitants.



The polite aeroplane HIJACKER.

Only one man has ever taken an aircraft hostage, and pirated away a ransom of $200,000.

He has never been caught, and the cash never recovered.

On November 24, 1971, the man boarded a Boeing 727 in Portland, Oregon, flying to Seattle, Washington, a 30 minute trip.

He was in his mid forties, had a homburg hat, carried a black raincoat and a briefcase, wore a navy blue suit, a neatly-pressed white shirt, and a dark tie with a mother-of-pearl tie pin.

He was a lean, tanned, six foot tall business-type, with neatly trimmed hair; a Mr Dan Cooper, according to his flight ticket.

There were 37 passengers and five crew members on board and soon after take-off Mr Cooper passed his stewardess a note.

She assumed it was just another man travelling alone, hopefully handing her his phone number. She stuffed it unread into her uniform pocked.

When she passed by again, he signaled her to lean close.

“You better read that note. I have a bomb”, he said, gesturing toward the briefcase on his lap.

The stewardess rushed to the cockpit, the captain immediately radioed Traffic Control, who quickly alerted Seattle police, who instantly contacted the FBI.

They all understood that ‘Cooper’ was demanding $200,000 in cash, and two sets of parachutes, a pair of backpacks and two chestpacks, often used as an emergency backup.

He ordered the items to be delivered to the jet when it landed at Seattle airport, or he would blow up the plane.

He asked for his written note to be returned to him when the instructions had been passed on.

When the stewardess returned, he opened the briefcase wide enough for her to see two red cylinders with wiring around them leading to electric batteries. He told her to tell the pilot to stay aloft until the money and chutes were ready on the runway at Seattle.

At the time airport security requirements were far more relaxed than today's stringent checks of everything going on board a plane.

Cooper had specified $20 bills, calculating that 10,000 such notes would weigh just 21lbs; smaller denominations would weigh too much, and larger ones more conspicuous to use ($100 bills were less frequently seen in 1971 than they are now).

The airline quickly provided the money, thinking it a far better commercial option than losing a plane, let alone having its passengers being blown to bits. But the FBI was puzzled by the request for two sets of parachutes.

Clearly, he was planning to parachute off the plane with the cash, but was he also going to take a hostage with him?

This negated the option of providing a parachute that would malfunction when opened.

The stewardess described him as behaving like a gentleman, even offering to pay for the bourbon he ordered. "He seemed rather nice. He was never cruel or nasty. He just seemed thoughtful and calm" she reported.

The plane landed at 5.40, and Cooper ordered it to taxi to a well-lit position on the tarmac, and the cabin lights dimmed as a deterrent to a police marksman.

He demanded a single employee drive to the plane with his money and chutes. Once he had taken and checked his delivery, Cooper allowed his 36 fellow passengers and a stewardess to leave the jet.

He instructed the crew to all join the pilot in his cabin, and talked to him using the flight attendant's cabin phone.

He ordered an altitude of 10,000 feet, with wing flaps set at 15 degrees and an air speed of no more than 150 knots. He

warned that he had equipment to measure if his request was deviated from.

He clearly knew his way around aircraft, and selected flight 305 as much for the plane as its destination.

The lightweight 727 could fly slower than other jets, making it safer to dive from, and with an exhaust that wouldn't interfere when he lowered the aft steps, and dropped into the evening sky.

The crew noticed a slight dip in the jet's nose, and a red light on the instrument panel indicated an open door on the aircraft.

Over the intercom the captain asked "Is there anything we can do for you?" The response was a simple "No". It was the last word they heard from Cooper.

They noted the spot, just above the Lewis River 25 miles north of Portland, but they felt they had to continue to Reno as he had ordered, and not disobey his instructions to all stay in the cockpit.

They didn't open the cabin door until they had landed, and called out over the intercom to see if Cooper responded.

Cautiously leaving the cockpit, they saw that the passenger cabin was empty.

It appeared that Cooper had secured the bags of money to his body using the nylon cords from the spare parachute.

He must have confronted a leap into stinging wind and icy rain, on a stormy night 7 degrees below zero at 10,000 feet.

He was never heard from again. Since 1971 the FBI has processed over 1000 suspects, both plausible and serious; the case is still being investigated today.

Many experts believe Cooper must have been killed on landing, though no body has ever been found.

Many other experts are equally convinced that the Cooper's planning was so meticulous, he successfully escaped with his life and the money.

But indisputably, his legacy provided a tale of criminal bravado and allure worthy of Hollywood.



Sioux Indians KEPT his SCALP. But Robert McGee KEPT his LIFE.

McGee was the sole survivor of Sioux Chief Little Turtle's attack on Fort Larned, Kansas in 1864. McGee was struck by 2 arrows in his back, and while alive on the ground had almost his entire scalp sliced off.

McGee never lost consciousness and remembered witnessing the marauders riding off, whooping with delight as they waved their hairy trophies.

Native American Indians have manifold reasons to regret the arrival of Columbus in America.

Many Indians were slaughtered in the wars with European colonialists who were spurred by the ideology of Manifest Destiny; this held that the United States was intended to expand from the East to the West coast of the American continent.

But even more crippling to the indigenous U.S. population were the infectious diseases we brought to their home.

Native Indians had acquired no immunity to European diseases, enabling smallpox to decimate 80–90% of Native Americans during the epidemic.

Many Indian tribes fought alongside soldiers of the United States against the British in the Revolutionary Wars. They were welcomed to help the founding of the Independence of America, but were quickly rendered invisible by historians celebrating the birth of freedom.

Other tribes were supported by British merchants and U.S. government agencies and fought in many battles against the Revolutionaries, in exchange for a promise to set up an Indian nation in what is now Ohio and Wisconsin.

When the British made peace with the Americans, the surplus-to-requirements Native Indian tribes were left with no choice but to surrender their land to the Federal government, or fight for their contracted rights.

For over a century, the Indian Wars continued, with the final battles between Mormon settlers and the indigenous Ute Natives in 1922, with the final war lost by the Apache in 1924 – 302 years after the first Indian massacre in Jamestown.

It wasn't until younger historians started studying the history of the American Indian that their plight could no longer be ignored.

Dee Brown's influential book *Bury My Heart At Wounded Knee*, published in 1972, was followed by scathing academic studies on the racist cruelty of the Puritan fathers.

Eventually, even Hollywood became revisionist in its portrayals of the 'Red Indians' as savage 'baddies', with movies like *Dances With Wolves*.

In the early years of Westerns, casting 'Red Indian' extras proved to be an easy task, with a tribe of Navajos encamped locally in Malibu.

The Indian families lived traditionally, but they were also placed on film studio payrolls. Whenever 'redskins' were needed for the next big Western production, coaches pulled up to their camps and transported them to the movie set.

There was the bonus of requiring no make-up artists, wardrobe or stylists – these Indians came ready to film.

However, if a major character was to be a 'Red Indian', as in Robert Aldrich's 1954 *Apache*, which told the story of the tribe after the final surrender of their leader Geronimo, leading the cast of Indian Chiefs were Hollywood actors Burt Lancaster and Charles Bronson, covered in sticky fake tan, their American accents as pure as their blue eyes.



Burt Lancaster playing an Apache chieftain.

Geronimo was born Goyathlay, meaning One Who Yawns, in 1829 and was prominent for his relentless assaults on the Americans and Mexicans during the Apache Wars. When Mexican troops killed his mother, wife and three children during one of their raids, he devoted his life to seeking revenge.

In one epic battle, Geronimo disregarded his own safety, ignored the continuous stream of deadly bullets flying past him, and kept stabbing his enemies mercilessly with his knife. Pleading in anguish to their saint San Geronimo, the Mexicans provided him with his notorious sobriquet.

When the film *Geronimo* was released in 1939, the U.S. Army was testing out the notion of platoons of soldiers parachuting into battle from the skies. The night before the first full scale troop test-jump was planned in Fort Benning, Georgia, the anxious paratroopers were invited to a screening of the film.

They clearly found it inspiring, as it became a tradition amongst soldiers to scream "Geronimo" as they launched themselves out of aeroplane hatches; respectfully, when the Army christened the 501st Parachute Infantry Battalion in 1941, they placed 'Geronimo' on their insignia.



WOLVES TERRIFY HUMANS. EAGLES TERRIFY WOLVES.

In Siberia, wolves make the most ferocious of predators; operating in packs, they are more than a match for even a fully grown bear, or bison.

But they squeal like girls when a golden eagle swoops, hitting its target wolf at high velocity, clawing and raking with razor-sharp talons.

The wolf will attempt to bite back at its much lighter attacker, but once its canine quarry is fixed in its iron grip, the eagle takes moments to dispatch the wolf by ripping open its throat.

Generally though, Russian wolves rule the icy outpost of Siberia.

A super-pack of 400 wolves have been terrorising the town of Verkhoyansk, leaving forty horses dead in just a few days, and feasting on livestock.

The hard winter, minus 49°c, killed off the wolves' usual prey, rabbit and deer, so they changed tactics.

Rather than operating in small teams of six or seven, they formed a wolf army, ready to take on all comers.

Verkhoyansk is in a state of permafrost at its harshest, located within Stalin's Death Ring, where Russia's former leader would banish dissidents.

The 1,700 residents are clearly a hardy group, and have formed 24 vigilante groups of armed hunters to rid themselves of the wolf menace. A bounty of £210 is offered for every dead wolf brought to officials.

It is still dangerous work for the hunters, who often find themselves suddenly surrounded by a large, angry and hungry pack, which they try and outrun in their snowmobiles.

Once the daylight hours increase, the hunters will deploy helicopters, to overcome the menace more efficiently. Or, of course they could simply import a large flock of golden eagles, and set them to work.

The town of Oymyakon in far Eastern Siberia holds the record of the coldest permanently inhabited place in the world.

With temperatures sometimes as low as minus 71.2°c, the ground is frozen solid all year round; it is common for birds to freeze to death in mid flight. However, the population of 472 manage to survive in these conditions.

Only Antarctica has a lower recorded temperature of minus 89.2°c, though nobody has yet to successfully carve out a comfortable life there.

In Britain children relish the opportunity for a day off school when a snowfall causes transport to shut down.

However, in Oymyakon the village school only closes when the temperature sinks below minus 52°c, and the children there hate it – when it happens they are allowed to play outside for just 20 minutes a day.



Women prisoners in forced labour building 'The Road of Bones'.

Oymyakon is located on the desolate Kolyma Highway, the only highway in the Eastern half of Siberia and the most remote in all of Russia.

It is the simplest means to reach the area, and it only connects to the rest of the federal highway system in the winter when the Lena River freezes and the ice is thick enough to drive on.

The 197km road is so singular that locals simply refer to it as 'The Route', when they are aren't referring to it by its other, more sinister name, 'The Road of Bones'.

During the construction of the road, the skeletons of the workers who died building it were buried beneath it.

Kolyma Highway took 21 years to build between 1932 and 1953, during Stalin's rule.

Gulag, the Soviet Union government agency that controlled forced labour camps, used thousands of convicts and political prisoners to carry out heavy manual tasks as punishment.

The construction of the Kolyma Highway was one such scheme; with gold and platinum discovered in the area, it was decided that easier access was needed for efficient mining.

Eighty Gulag camps were established in the Kolyma region to provide the man-power; the number of prisoners grew from 11,000 in 1932 to 170,000 in 1952.

The death toll of workers buried under the Kolyma Highway is unknown, but many died from exhaustion, exposure, and malnourishment. Some were simply shot by a camp commander for not being seen to be working hard enough.

A number of former Gulag camps have now become leading industrial hubs in the area; the rest of the settlements still sit by the roadside, abandoned and ghostly, littered with the corpses of birds who froze while flying overhead.

According to Russia's most renowned dissident, writer Alexander Solzhenitsyn, the overwhelming majority of his fellow Gulag inmates were simple peasants or workers, who did not know how they came to be branded 'Enemies of the People'.

He recalls that when prisoners arrived at the camp they were split into groups, by term of sentence. One prisoner with a ten-year sentence objected. "But I have done nothing wrong".

The guard's response? "No, those who have done nothing wrong are in the five-year line."



The HANGING of Mary.

In 1916 a circus elephant nicknamed ‘Murderous Mary’ was hanged in Kingsport, Tennessee for killing assistant trainer Rod Eldridge.

At the time Mary was Tennessee’s most notorious killer.

To carry out her death sentence, an industrial crane was mounted on to a railcar; it couldn’t withstand her five-ton weight and the chain snapped, causing Mary to fall and break her hip.

The second attempt was successful and Mary was buried beside the train tracks.

Her trainer Eldridge had stabbed at Mary with a bull hook to get her to move the way he wanted. The elephant grew upset, and turned on Eldridge, flinging him into a drinks wagon with her trunk and stamping on his head.

At least death was swifter for Eldridge than for Mary, who had to endure her prolonged hanging.

In essence the circus owner was too nervous about the damaging effect on his business to allow Mary to live.

Local crowds were chanting “Kill the elephant!” and would fire their guns at the bewildered creature, until it was made clear Mary would be executed in public.

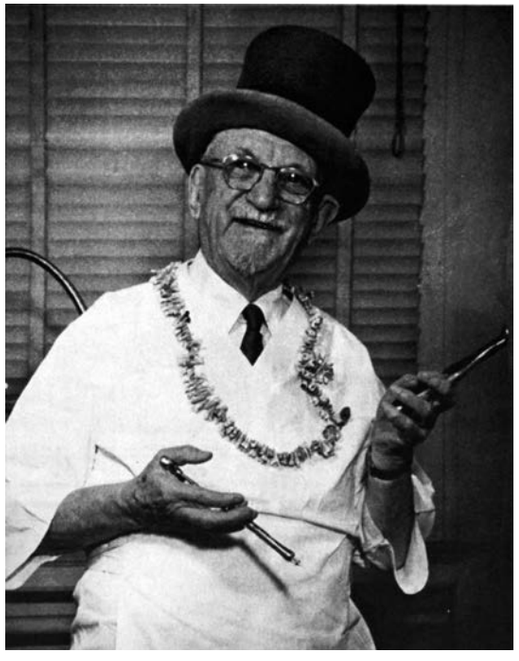
Around the same time, Edgar Parker established his own chain of businesses, bringing together the separate worlds of circuses and dentistry.

Parker had attended Philadelphia Dental College but few patients turned up when he opened his surgery. He decided that if patients wouldn't come to him, he would go to the patients. He enlisted the help of an ex-manager of a famous circus act, legally changed his first name to Painless, and hit the road.

Painless Parker's Dental Circus was essentially a dental chair attached to a horse drawn carriage with an accompanying band. Parker dressed elegantly, in a spotless white doctors' coat and grey beaver top hat – with an impressively large bucket of teeth placed between his legs.

Parker promised that his dentistry was, indeed, painless, and he specialised in extractions.

He pulled 357 teeth on one particularly popular day, which he then strung on a necklace and wore as his trademark. He charged 50 cents for each pulled tooth, promising to give the customer $5 if the operation was painful.



Painless Parker wearing his toothy necklace.

His secret was neither great skill, nor magic.

Patients were simply introduced to Parker's speciality cocktail of whisky and cocaine. He named it 'hydrocaine', and it sufficiently numbed them enough for them for a pain-free extraction.

The loud band also helped to cover up any whimpers or groans from his patients, while the gathering crowd watched the spectacle in awe, queuing to have their own poor teeth attended to.

Parker's business thrived and he opened 28 dental offices, employing 70 dentists, and racking up ever growing profits.

The American Dental Association branded Parker a "street-performing menace to the dignity of the dentistry profession".

However, much of what he was championing – patient advocacy, easy access to dental treatment and, above all, good marketing of dental care are also championed by the Dental Association today.

My favourite dentist remains the poor gentleman from Albania who was plucked from his small rural practice to be become Prime Minister.

The actual Albanian Prime Minister, Enver Hoxha, was fearful of assassination throughout his long reign, and one of his lieutenants produced the dentist, who bore an uncanny resemblance to Hoxha.

A little plastic surgery, work on his voicebox and speech patterns, and the ruse was complete.

The dentist got to live the life of a Prime Minister, though of course, he too now had to fear an assassin's bullet any time he appeared in public.

Hoxha's dictatorship of Albania continued for 40 years until he died in 1985.

His dentist lived on for a further 18 months, disguised again, and now in obscurity.



A moving PORTRAIT – made in an AIRCRAFT LAVATORY.

You might not think that a cramped aeroplane toilet is particularly inspirational, but Nina Katchadourian has found a way to tap its hidden resources.

For a 2011 residency at the Dunedin Public Art Gallery, New Zealand, Katchadourian set herself the challenge of making the bulk of the work for her final exhibition on the 18 hour flight from her native San Francisco to Auckland.

"While in the lavatory on a domestic flight in March 2010, I spontaneously put a tissue paper toilet cover seat cover over my head and took a picture in the mirror using my cell phone.

The image evoked 15th-century Flemish portraiture... I made several forays to the bathroom from my aisle seat, and by the time we landed I had a large group of new photographs entitled Lavatory Self-Portraits in the Flemish Style.

I was wearing a thin black scarf that I sometimes hung up on the wall behind me to create the deep black ground that is typical of these portraits. There is no special illumination in use other than the lavatory's own lights and all the images are shot hand-held with the camera phone.

At the Dunedin Public Art gallery, the photos were hung in historical frames on a deep red wall reminiscent of the painting galleries in museums like the Metropolitan Museum of Art."

On the other end of the scale to the tiny aeroplane lavatory is the gigantic public bathroom in Chongqing, China, the largest in the world in fact.

More than 1,000 toilets are spread out over 4 floors and 32,290 square feet, inside a building with a faux Ancient Egyptian façade;

and the town officials' aim is to promote tourism, and spread 'toilet culture'.

Here, there is a toilet for everyone; from the classic stalls in minimal marble to outdoor lavatories with a view. There are several artistically-shaped urinals – brightly coloured, open mouthed crocodiles, a crimson sink moulded as a woman bending forward wearing stilettos, and a unique use of the Virgin Mary.

The modern toilet is widely attributed to Alexander Cummings, a London watchmaker, who was granted the first patent for a toilet in 1775.

Cummings had improved upon the earlier designs of John Harrington, a writer and godson of Elizabeth I, who installed a primitive contraption in her palace in the late 1590s.

Elizabeth was initially appalled at the idea of everyone in court knowing when the royal bowels had been emptied by the tell-tale sudden sound of gushing water.

Harrington's toilet didn't catch on; Londoners appeared content with open sewers and hadn't yet realised the diseases being festered.

Many pretty Victorian toilets are embellished with the delightful 'Thomas Crapper & Co.' branding, the company who had further developed the toilet, and opened the world's first lavatory showroom on King's Road, London.

Crapper's flushing toilet was patented in 1819, with a design that has changed very little today. His invention succeeded dramatically as the relationship between hygiene and disease had finally dawned on us; Queen Victoria, mourning the loss of Prince Albert to typhoid, and almost losing her son Prince Edward to the same disease, passed a Public Health Act in 1848 stating that all new houses should be built with a toilet facility.

Since 1848, all of England has been flushing, and much of the rest of the developed world too. Today the gallons of water used causes people to worry about the wastefulness of our toilets. Eco-enthusiasts have attempted to invent new sanitation systems in households, but nobody has gone further down the path to

ingenious eco-friendliness as the traditional 'pig toilets' found in rural Goa and China.

Dating back to the Chinese Han dynasty (206 BC to 220 AD), pig toilets pair pigsties with privies. An outhouse is mounted over a pigsty, and as you surmised, the pigs wait below a chute from the lavatory in eager anticipation. In poorer homes, the set up is more of a curtained, elevated platform with a hole to the ground, and as the pigs can sometimes become over-excited and aggressive, you need a stick to bat their prying snouts away from your behind.

If you enjoy a Sunday roast pork, you will be relieved that pig toilets have all but vanished in China and are rapidly dying out in Goa; most households now build septic tanks to deal with their waste.

Of course for thousands of years up until the mid twentieth century, in China, Korea and Japan, human waste by-products were in high demand, and considered valuable.

The East managed to feed large populations by fertilizing crops with 'humanure' without polluting their water supplies, and even designed special canal networks to transport it by boat. Remember please that was during the time medieval London was throwing dung into the streets.

When American soil scientist F.H. King visited China in 1911 to document their sanitation systems, his findings were remarkable. A booming business in dung collectors, traders and transporters was apparent, collecting the 'waste' from every person's home in airtight, terracotta jars.

The population of China at the time was similar to that of Europe, some 400 million inhabitants; every year more than 182,000,000 tonnes of humanure was collected, equating to 1,160,000 tonnes of nitrogen, 376,000 tonnes of potassium and 150,000 tonnes of phosphate, all of which was returned to the soil.

The 4,000 year tradition was brought to a close with the arrival of even more effective artificial fertilizers, originally imported from the West during the first half of the twentieth century.

So today, all of our waste goes to waste.



PILE them HIGH. SELL them LOW.

Overstocked with a large supply of men's spring and winter coats, a clothier in Copenhagen, Denmark, adopted a unique sales scheme.

He erected a scaffolding around his store building and completely covered it from roof to sidewalk with more than a thousand overcoats.

This image, taken by a passing American tourist, was published in newspapers across Europe and in America.

The novel display attracted prospective customers in such droves that police were summoned. Although the police ordered the proprietor to remove the display, he succeeded in selling all the overcoats.

The event could be seen as one of the most effective early PR stunts in the world.

The art of window dressing has been widely established the world over, and has become especially prescient given the increasing proximity of artwork to commodity.

Andy Warhol began his career as a commercial illustrator and window dresser, with his innovative displays incorporating his first use of graphic comic book strips and blown-up black and white newspaper scraps. They provided an ideal backdrop to mannequins in the latest 1959/60s fashions.

In April 1961 he exhibited five large paintings in the window of Bonwit Teller, a New York department store, uncannily bringing art and commerce into direct contact.

This gesture radically broke with the high modernists of the era who stressed skill, the individual heroic artist, and an elevated and eternal form of aesthetics.



Andy Warhol paintings first shown as window displays in Bonwit Teller department store in New York.

This was the birth of the Pop Art movement that would do away with the elevation of art from life, and revel in the mass produced.

The birth of Pop Art came at the apex of a set of relationships that had their origin in the Industrial Revolution; techniques of manufacture had lead to the first ever mass production of goods, and now consumers en masse had enough disposable income to buy everything new and exciting on offer.

Earlier, the arcades of Paris were the first gleaming monument to this level of consumption; products from all over the world were displayed behind translucent glass, the milling crowds protected from the elements by soaring roofs, free to indulge in the new pastime of window shopping.

At the turn of the 20th century the sociologist and economist Thorstein Veblen coined the phrase ‘conspicuous consumption’; the purchasing of goods in order to provide the individual with a status through the display of them.

His observation was that it was common for people to forego basic needs and necessities of life in order to appear well dressed.

The resonance of such observations made over a hundred years ago still remains as powerful today

With the surge in spending on consumer goods, now readily available due to innovations in production such as the Ford assembly line, came the rise of advertising. The earliest examples actually predate the industrialization of Europe and America; papyri bearing commercial messages and political campaign information have been discovered in the ruins of Pompeii and ancient Arabia.

In the 20th century advertising became one of the only industries to provide career choices for women.

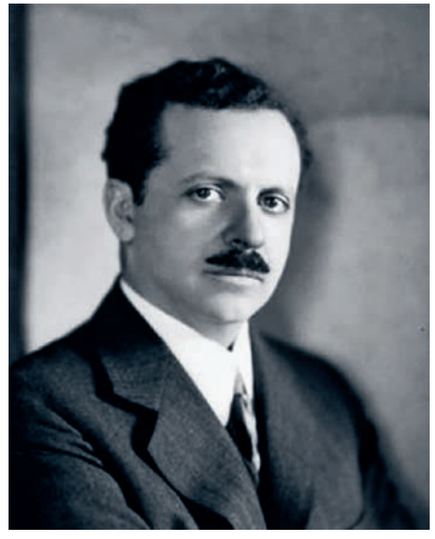
Given that women were the key purchasers of most products for the household, and therefore the target for most advertising campaigns, women’s insight into female purchasing decision making was considered of great value to marketing.

A radical revolution in the way in which populations were manipulated was brought about by the nephew of Sigmund Freud – Edward Bernays.

Bernays had worked for the U.S. government during World War II, and was struck by the success of the propaganda campaigns that had been used across Europe before and during the war.

He sought to implement these techniques in peacetime, for the furthering of consumerism, renaming propaganda ‘public relations’.

His inspiration was informed by what he had gleaned from Freudian psychology and he was struck by the idea that through



Father of propaganda Edward Bernays.

using knowledge of the desires of men and women, a disaster like the War could be avoided in future.

Dangerous libidinal energies, such as those unleashed in Germany under the rule of Hitler, could be usefully channelled by corporate bodies for economic benefit – mass promotion could satisfy the desires of men and women, whilst also providing society with financial and industrial growth.

He used his strategies and techniques in the service of some of the biggest corporations in the USA – Procter & Gamble, CBS, General Electric and Dodge Motors. But no campaign exemplifies his methodology better than his work for Lucky Strike cigarettes.

Women smoking in public in U.S. culture was considered taboo; indeed many women involved in the feminist movement would deliberately light up in public as a method of protest.

Bernays encouraged the American Tobacco Company to actively advertise to these women as an untapped consumer of their product, recruiting female smokers to 'campaign' in the Easter Sunday parade, openly smoking their 'torches of freedom'. News media captured the event, providing Lucky Strike with an unprecendented level of free advertising.

PR stunts can have lasting effects, and besides establishing smoking as a female pursuit, was responsible for the founding of the reknowned Tour de France.

The event was founded in 1903 as part of a sporting magazine *L'Auto*'s attempt to boost sales. They developed the Tour de France as the longest and toughest bicycle race in the world, and succeeded in catching the world's attention, making *L'Auto* the most popular sporting magazine in France.

A rather more radical and misguided PR example was devised by the aptly named William Crush of the Missouri–Kansas–Texas railroad, who thought an organised train crash would make his line the most famous in the world.

Over 40,000 spectators poured into Texas, keen to witness this high-speed spectacle.

Accelerating to 45mph each, the trains hurtled towards each other over 4 miles of track.

The crews of both jumped clear just before the crash, which turned out to be rather more spectacular than planned as both boilers of the locomotives exploded on impact, showering the assembled crowds with red hot metal.

Three people were killed, several badly injured, and the event photographer lost an eye.

This PR disaster resulted in Crush being fired. But he was re-hired the next day after the press failed to criticise the company on the calamitous promotion.

I cannot imagine the same leniency from either the media or public today, so it's probably safer to stick more traditional methods of drumming up business, even if it simply means displaying your overcoats ten storeys high.



One of the locomotives prior to the crash.



The FUNGUS that CREATES ZOMBIE ANTS hasn't INFECTED HUMANS – YET.

Zombies may only inhabit a post-apocalyptic world in tediously silly movies.

The Undead, shuffling in hordes looking for victims to feast upon, may be a B-film cliché too far, but it doesn't make zombies a mere fiction.

Ophiocordyceps Unilateralis, the most terrifying organism on the planet, is a parasitic, behaviour-altering fungus that inhabits ants in the tropical forests of Africa, Brazil and Thailand.

The infected are commonly known as 'Zombie Ants' due to the sinister mind-control the fungus unleashes.

It enters the insect by releasing spores that lodge in the body after landing from above, or it waits its prey by resting on the forest floor.

The process begins by consuming the ant's soft tissues, as a powerful yeast moves throughout the body to the brain.

Once there, the organism produces chemicals which take over the entire nervous system, forcing the ant to act against its own natural will.

The fungus makes the ant climb up the stem of a sapling and then bite forcefully onto the underneath side of a leaf to secure itself to plants that are ideal for fungal growth.

It then effectively kills the ant, whilst continuing to grow inside its host by fortifying its exoskeleton.

Finally, the fungus marks the end of its lifecycle by sprouting a stalk out of the dead ant's head to release its spores. The whole process takes 4 to 10 days.

An equal master of mind control is the Thorny-Headed worm, found all over the world. Characterised by an elongated mouth and spines which it uses to hold on to the gut wall of its victim, the Thorny-Headed worm needs to occupy two hosts to complete its life cycle.

They start their life inside invertebrates that live in water, such as small crustaceans, and complete their life in the birds which feed on them.

Crustaceans tend to avoid the birds to whom they are prey by hiding in the murky deeper water far from the surface. But when they are infected with the Thorny-Headed worm, natural impulses are ignored as serotonin is released into its body. It's a neurotransmitter that lifts mood and emotions; subsequently they become attracted to the light, swim to the surface and even latch on to rocks and plants on the banks, making them easy prey for the worm – and then a hungry bird. The worm then lives out its life in the perfect conditions of the bird's stomach.

The deceivingly attractive Emerald Cockroach Wasp, which lives in tropical regions of Africa, India and the Pacific Islands, rather likes to play with its food.

On finding a cockroach, the female wasp stings it on its underside with a paralysing injection. The cockroach finds its legs can no longer move.

Then the wasp proceeds to puncture the cockroach in the head in a specific part of its brain, numbing it, removing the impulse to flee or fight. The roach is now in a zombie-like stupor.

The wasp searches for a burrow in which to take the poor victim, chews off the ends of the cockroach's antennae and drinks some of its blood. Then she grabs onto the remaining antennae and leads it to the burrow, with the cockroach obediently following like a dog on a lead.

Once inside the burrow, the wasp lays an egg inside the cockroach's abdomen and leaves, blocking the entrance with stones.

The egg hatches a larval Emerald Cockroach Wasp, which slowly eats the living cockroach from the inside, starting with non-vital organs to keep its meal fresh, and then moves on to the rest of the body.

It takes about 8 days; even though the still-living cockroach is hungry and in pain, the idea of running away never occurs to it.

Eventually the larva pupates turning into an adult wasp, leaving the burrow, and the now dead cockroach. If you are starting to feel sympathy for cockroaches abused by the wasp, they actually have an impressive repertoire of their own to make our skin crawl.

Cockroaches are known to be the hardiest of insects, capable of surviving on very limited resources, such as the glue from the back of a postage stamp, and are capable of managing without air for 45 minutes.

It has been accepted that only cockroaches will survive if a nuclear war destroys mankind; they have a radiation resistance of up to fifteen times that of humans. They also don't need a head to survive. They breathe through openings all over their bodies instead of relying on a single mouth, and they do not require their brain to control this function.

In fact, they have ganglia – masses of nerve cells – allowing them to move and react for weeks after their heads are removed; creepily, their heads can also live on without their bodies.

It's a skill I would like to master, able to entertain the family as the rest of my body continues its sorry deterioration.

I missed the 2009 movie *Zombieland*, starring Woody Harrelson, Jessie Eisenberg and Bill Murray. It received both critical and box-office success, eclipsing *Dawn of the Dead* as the top grossing zombie film to date.

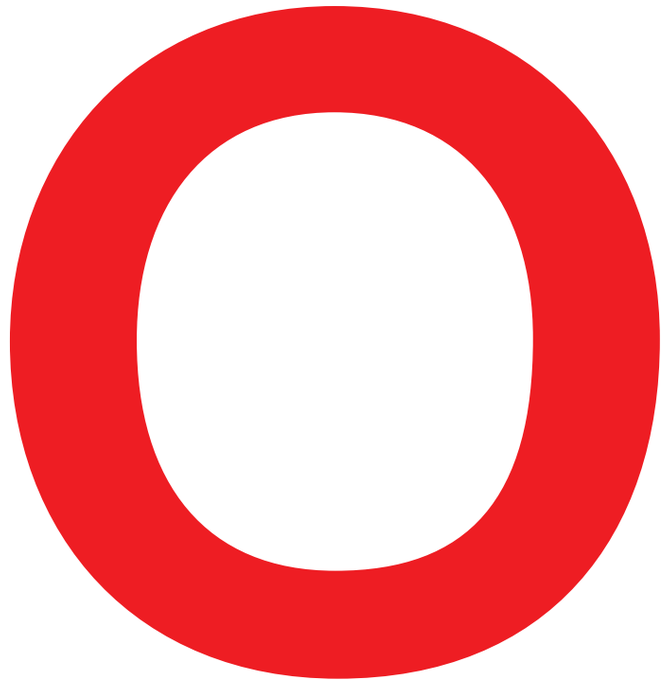
The main protagonists take an extended road trip through the U.S. southern states, seeking a sanctuary with other survivors, after flesh-eating zombies have taken over much of the planet.

The cause of the zombie infection? Mad Cow disease.

America's leading film critic Roger Ebert was surprised by *Zombieland's* ability to be humourous in what should have been a dreary, routine horror film. He found "the filmmakers showed invention and well-tuned comic timing".

Time magazine endorsed it as "an exhilarating ride from start to finish".

So far the film has taken over $200 million, so the producers don't require any help from us; but I'm intrigued enough to rent a DVD for a pleasant night at home. The cast are lovely, so how awful can it be?





In 1923, AMERICA'S NINE RICHEST MEN met at this CHICAGO HOTEL.

HOW DID THEY DIE?

They convened at: The Edgewater Beach Hotel, Chicago.

Their combined wealth was greater than the U.S. government's.

They were:

1. Charles Schwab, President of the world's largest steel company
2. Samuel Insull, President of the world's largest utility company
3. Howard Hopson, President of the world's largest gas company
4. Arthur Cutten, the world's leading wheat supplier
5. Richard Whitney, President of the New York Stock Exchange
6. Albert Fall, member of President Harding's Cabinet
7. Leon Frazier, President of the International Bank
8. Jesse Livermore, the leading investor in the Stock Market
9. Ivar Kreuger, head of the world's largest securities trading organisation

What happened to them:

1. Charles Schwab died bankrupt, living on borrowed money for his last 5 years
2. Samuel Insull died penniless as a fugitive from justice for fraud violations
3. Howard Hopson died insane in a mental asylum
4. Arthur Cutten died bankrupt overseas, indicted for tax evasion
5. Richard Whitney was imprisoned for fraud
6. Albert Fall went to prison for embezzlement, released so he could die at home
7. Leon Frazier committed suicide
8. Jesse Livermore committed suicide
9. Ivar Kreuger committed suicide

The richest men who have ever lived include a number of surprises. With adjustments for inflation included, alongside the greats of American oil and steel, John D. Rockefeller ($336 billion) and Andrew Carnegie ($309 billion), you will find William the Conqueror ($209 billion).

Known as William the Bastard until leading his invasion of England in 1066, he had accumulated his vast wealth as the spoils of war before even taking our throne.

American legend Cornelius Vanderbilt ($185 billion) started buying railroad lines in 1826, at the age of seventy. He had made his first far more modest fortune as a steam-boat entrepreneur, but the growth of the railways across America gave his bank balance a significant boost.

Alan Rufus ($179 billion) was a Norman leader who joined William the Conqueror in his takeover of England in the 11th century. Alan the Red owned much of the land between Yorkshire and London, and built the grandest palace of the era, Richmond Castle.

The source of the Astor fortune ($121 billion) grew out of a monopoly on fur trading within the U.S., but his fortune increased



William the Conqueror.



Cornelius Vanderbilt.

dramatically by investing in real estate in New York City.

One of Shakespeare's meekest characters John of Gaunt ($101 billion) was Richard II's regent during much of his rule, but spent most of his days securing wily commodity trades – and then bringing his son Henry of Bolingbroke out of exile to take the English throne by deposing Richard.

And so the list continues, shared between America's legendary business leaders amassing fortunes in timber, department stores, gold, and the Dukes and Earls of Britain.

Any of these billionaires could comfortably buy out today's wealthiest men – Carlos Slim, the Latin American telecom king; Warren Buffet, the brilliant investor known as the Oracle of Omaha; the Waltons, owners of Walmart.

Each of their fortunes languishes in the $60 billion league.

The harder one looks for a recipe – the secret ingredient that enables certain people to accumulate magnificent riches – the easier it is to grasp a simple observation by John Paul Getty: my formula for success is to rise early, work late, and strike oil.



Before NEIL ARMSTRONG there was HAM, our FIRST ASTRONAUT.

In 1961 monkeys of the world celebrated the safe return of Ham, the first chimpanzee to survive space travel.

He was one of 20 chimps trained at the Holloman Aerospace Medical Centre in New Mexico, that provided his acronym HAM after his landing; he was known as 'No. 65' up until then. NASA was concerned that the American public might find it upsetting if a chimp they knew as Ham had suffered and died in space. His handlers, however, called him Chop Chop Chang.

Born in French Cameroon in 1956, Ham had no idea of the kind of celebrity he would encounter in his life. His childhood took a turn for the worse when he was captured by animal trappers and sent to a wild bird and animal farm in Florida, until NASA spotted him and purchased him in 1959 for $457.

Ham underwent 2 years of rigorous training with his fellow chimponauts, and was taught simple tasks such as pushing a lever in response to a flashing blue light. The aim of the experiment was to see if the chimps could perform these functions in space. This would demonstrate that humans could also operate equipment during lift-off, weightlessness, and re-entry.

Ham was considered the brightest of his peers and was selected for the mission.

Equipped with space suit and buckled into a ‘flight couch’ he was launched for his suborbital flight in the MR-2 Rocket.

In the craft Ham performed his tasks as he had Earth, only a fraction of a second slower, and was filmed throughout the 16 minute flight, travelling 363 nautical miles.

The rocket suffered partial pressure loss and landed 60 miles off course in the Atlantic Ocean.

He was rescued by boat, found to be well with no signs of injury from exposure to weightlessness, and was rewarded with an apple.

Ham was trainer Edward Dittmer’s favourite, who described him as playful, loving, and childlike.

Although he emerged from the rocket grinning, when NASA personnel tried to get Ham back into the flight couch for press photos, he refused to go near it, displaying terror when approaching the craft.

Ham’s mission took place in the midst of the Space Race during 1959 to 1963 between America’s Project Mercury and Russia’s Vostok Programme.

Project Mercury had two aims; first, to put a human into orbit around the Earth, and second, to beat the Soviet Union to it. They achieved their first aim, but not the second, though their findings laid the groundwork for the subsequent Apollo moon landing.

Both sides used animals in their primary tests to see how space travel affected living things. No species it seems was exempt, as spiders, rabbits, rats, and dogs were suited up and prepared for lift-off. Before Ham made his trip to space, many animals had gone where no animal had gone before, with most not returning alive.

The very first creatures sent into space were humble fruit flies aboard a U.S. launched V-2 rocket in 1947, and all survived. These early launchings were to test for radiation exposure at high altitudes. Then came a succession of moss, insects and mice until

the U.S. sent up Albert II, a Rhesus Monkey in 1949, who died on impact after the rocket’s parachute failure, and Gordo another Rhesus in 1958, whose spaceship was never recovered.

The first animal to successfully orbit Earth, like the first man, was Russian; a female dog named Laika. She was a stray mongrel living on the streets of Moscow before being poached by the Soviet Space Programme, and trained alongside two other dogs before being chosen as the occupant of the Soviet spacecraft Sputnik 2.

Stray dogs were selected as space cadets as they were practised in enduring the extremities of cold and hunger, and the scientists felt, were well suited to long periods of inactivity.

Life at the training facility proved tougher than life on the streets; Laika was confined in progressively tinier cages to prepare her for the cramped cabin of Sputnik 2.

The cabin was so small that she was unable to urinate, defecate, or turn around. She was placed in space simulators that caused her pulse and blood pressure to skyrocket, and had to eat high-nutrition gel that would be her only sustenance in space via the onboard dispenser.

Laika had electrodes attached to her skin, was placed in her harness and space suit, and launched into orbit in October 1957.

For many years after the rocket was launched it was generally unknown how long she had survived in space; Sputnik 2 had bounced off the atmosphere, and the block core did not separate from the nose cone as planned.

Many believed Sputnik 2 was never intended to return to Earth, nor was the technology advanced enough that a return was possible – the press at the time focused on the political significance of the launch instead.

Laika was supposedly supplied with seven days worth of food, and euthanised with her last meal. Apparently it had been spiked with a sleeping pill and simultaneously a poisonous gas was released to provide her a near painless death.



Belka and Strelka with biomedical specialist Oleg Gazenko, who trained all the Soviet space dogs as well as early cosmonauts, including Yuri Gagarin.

However, in 2002 at a World Space Congress gathering it was announced that no life signs were heard from Laika within hours of the launch; by the fourth day it was obvious that the dog had died after being cooked to death due to the malfunctioning thermal control. Sputnik 2 decayed and re-entered Earth's atmosphere after 162 days in orbit.

In 1960 the Soviet Space Programme launched another rocket, Sputnik-5, and aboard was a Noah's Ark of creatures, including two dogs named Belka and Strelka, a rabbit, 42 mice, 2 rats, flies, and a number of plants and fungi.

All spent a day in space and came back unharmed. Strelka celebrated her return by giving birth to a litter of puppies, one of whom was given to John F. Kennedy as a gift, and named Pushinka. Kennedy referred to her as 'Pupnik', and Strelka's descendents are still in the Kennedy family.

In 1961, the Soviet Space Programme now felt confident enough to send human astronaut Yuri Gagarin into orbit. He came back unscathed after 1 hour in orbit and enjoyed worldwide celebrity.

Following the success of Ham, NASA launched their second, and all but forgotten, chimp recruit Enos. Enos' training was more intense than Ham's and he was to be exposed to weightlessness and a higher g-force for longer, whilst doing more complex tasks in the cabin. He piloted Mercury Atlas 5 in November 1961 and returned after 3 hours 20 minutes, and 2 orbits around the Earth.

But Mercury Atlas 5 also experienced problems – when Enos performed his tasks correctly, he was delivered a mild electric shock 79 times in a row instead of being rewarded.

He persisted despite the shock treatment, and when he landed ran around jumping for joy and into the arms of Edward Dittmer.

Two months after Enos' flight John Glenn became the first American to orbit the Earth.

Enos died of dysentery a year after his brave space adventure, and after much concern, research pathologists reported that no symptoms related to his time in orbit.

Ham, however, lived to the age of 26 in the zoos of Washington and North Carolina, dying in 1983.

His skeleton resides in the Armed Forces Institute of Pathology National Museum of Health and Medicine alongside the remains other fallen heroes.



NELLIE BLY – the JOURNALIST who went INSANE for a GOOD STORY.

This portrait could be of any young fashionable woman at the turn of the nineteenth century. Bright eyed and clear skinned she might be looking forward to a successful marriage, a large home and raising a respectable family.

However, this young woman had something entirely different on her mind – investigative journalism of the more intrepid kind.

Born Elizabeth Cochrane in Pennsylvania, USA, she used the name Nellie Bly as her pen name, and become renowned as one of the most courageous journalists of her day. At the age of 16 she was so incensed by an aggressively misogynist column in her local paper, she wrote a strongly worded rebuttal to the editor.

He was sufficiently impressed by the argument that he invited the man who had written it come in and work for the paper. When he discovered that the eloquent young gentleman of his assumptions was actually a petite teenage girl he refused to make good on the job offer.

However, Bly demonstrated her persuasiveness skilfully, and talked him into giving her a job anyway.

Her initial articles focused on the wretchedness of women's labour at the time, especially conditions in factory sweatshops; but as with most women of letters in those days she was slowly marginalised and assigned to the fashion and women's interest section of the newspaper.

Frustrated, she took the bold initiative of travelling to Mexico to report on life under the dictatorship of Porfirio Díaz. Her forth-right reports led to threat of arrest, and she returned to the U.S.

Disheartened once more with being assigned arts and theatre coverage, she moved to New York, broke and with no job lined up, but persuaded the New York World to give her the chance to produce an undercover report on the conditions in insane asylums.

Spine-chillingly she moved to a boarding house and behaved erratically and bizarrely enough to be committed. At the asylum she encountered horrific conditions. The hospital was filthy, rooms crawled with rats and the meals consisted of contaminated beef, gruel and barely baked bread.

Inmates would be forced to sit upright on wood benches all day in silence, shivering in the cold, and sadistically punished for deviating from the rigid regime of silence.

Patients considered dangerous were tied together with ropes, and staff would often beat them.

As pre-arranged, after ten days the paper organised her release; she wrote a devastating series of articles exposing the entire infra-structure of insane asylums. The government was suitably shamed into releasing funds in order cleanse the system of abuse and to monitor the conditions patients were cared for and housed in.

Like Nelly Bly, investigative journalists have taken immense risks in the pursuit of stories that expose corruption and ultimately often save lives.

Born in 1920 John Howard Griffin spent his life uncovering racism in the U.S. Deep South.

Taking a step even further than Ms Bly's assumption of madness, his determination to expose the prejudices faced by African Americans across the South lead him to actually change his skin colour, by taking drugs that altered pigmentation and spending many hours under a sun lamp.

After transforming himself he travelled across Louisiana, Mississippi, Alabama and Georgia, encountering the privations and persecutions faced routinely by millions at the hands of many white supremacists, and the authorities.

His findings were published in 1961 as a bestselling book, *Black Like Me*. A firestorm of anger erupted, forcing him to move his family abroad for a period of time, and there were reports of his effigy being burnt in some states.

Perhaps the most remarkable undercover journalist of recent years is the Spaniard Antonio Salas. He has infiltrated some of the most dangerous and closeted organisations in the world, including sex traffickers, hardcore Neo-Nazi hoodlums, jihadist terrorist groups, and the deadly organisation run by Carlos the Jackal.

For his recent role as part of a hard-line jihadist group he hand-copied the Qu'ran, invented a fully convincing background complete with murdered wife, contributed to radical publications as a pro Bin Laden journalist, attended terrorist training camps, and most painfully, after an invitation to a hamam, underwent a circumcision.

In interviews he revealed that his work has taken a psychological toll, leaving him particularly plagued by recurrent nightmares about the atrocities he has witnessed. He was most affected by his time undercover as a sex trafficker, negotiating the purchase of girls aged 10 to 12.

Often journalists around the world who work on on unearthing accounts of injustice pay a brutal price.

2012 saw the highest number of jailed journalists internationally since records began in 1990. This rise in numbers has been driven in part by the use of intimidation and imprisonment as threats against writers critical of the state.

In Turkey, Iran and China, charges of terrorism, treason and subversion are used against journalists, but nations on the roll call of journalist jailers include Eritrea, Syria, Vietnam, Azerbaijan, Ethiopia, Uzbekistan, and Saudi Arabia.

Eritrea has the dubious honour of being the world's most unlikely country to implement due process when charging individuals; 28 journalists are currently being held there with no public charge or trial.



HOW to CURE a BAD BACK .

If you want to write a best-selling book, concentrate on cures for back pain.

This formula seems to have worked splendidly for the writers featured on page after page of Amazon Books; currently the list is headed by Sarah Key's *Back Sufferers' Bible*, followed by *Treat Your Own Back* by Robin McKenzie, and goes on to list *Goodbye To Bad Backs*, *Mind Over Back Pain*, *The Bad Back Book*, *Back Talk*, *The Good Back Guide*, *Back Pain Remedies For Dummies*, *Healing Back Pain Naturally*, *Safe Sex For Bad Backs*, *Living With Back Pain*, *The Bible Cure For Back Pain*.

There are specialist titles – *Back Injury Among Healthcare Workers*, *Playing Golf With Your Bad Back*, *Strong Women Strong Backs*, *Cycling To Strengthen Your Spine* – and guides to relief offered by Meditation, Yoga, Pilates, Acupuncture, Stretches, Diets, Posture, Juice Fasting – more pages of books on bad backs than anyone could possibly crawl their way through.

Back pain clearly bedevils millions; it is the fifth most common reason to visit your doctor.

97% of sufferers are diagnosed with no serious underlying pathology, but they experience pain because of the complex nature of the spine's interconnecting network of nerves, joints, muscles, tendons, and ligaments, all of which are perfectly capable of providing you with anything from a persistent dull ache, to an overwhelming agony that grips your body forcing you to move gingerly, inches at a time.

Most common are strains and spasms caused by muscle imbalances that are not wholly understood by specialists. You may suffer from a range of disc malfunctions, caused by the extreme sensitivity of the ligaments around some of your spinal cord.

Even chronic pain sufferers present normal MRI or CT scans. New attention is being focused on the role of the dorsal ramus, whatever that may be, in patients who are victims of great pain, yet display no radiographic abnormalities.

So complex is the issue, professional medical organisations recommend that physicians do not immediately seek a diagnosis, but instead begin treatment to reduce discomfort; in most cases the pain goes away naturally after a few weeks.

Most patients prefer to keep the pain manageable and use therapies to reduce pain intensity, seeking to avoid major surgery. Though an operation may indeed be the quickest way for many patients to feel better, only the small minority of back pain sufferers require surgical intervention – those with degenerative disc issues, or joint disease, or a compressive fracture for example.

Some backaches respond to heat therapy, some to cold application, some to acupuncture.

Medication is equally uncertain – in the short term muscle relaxants can be effective, and anti-inflammatory drugs sometimes help.

If you are fortunate, an expert masseur or chiropractor can provide relief, though many medical practitioners frown upon any manipulation of a delicate problem area.



Completely ineffective stone massage therapy is available at specialist health spas.

Bed rest is considered counterproductive, and ultrasound has been shown to produce little benefit.

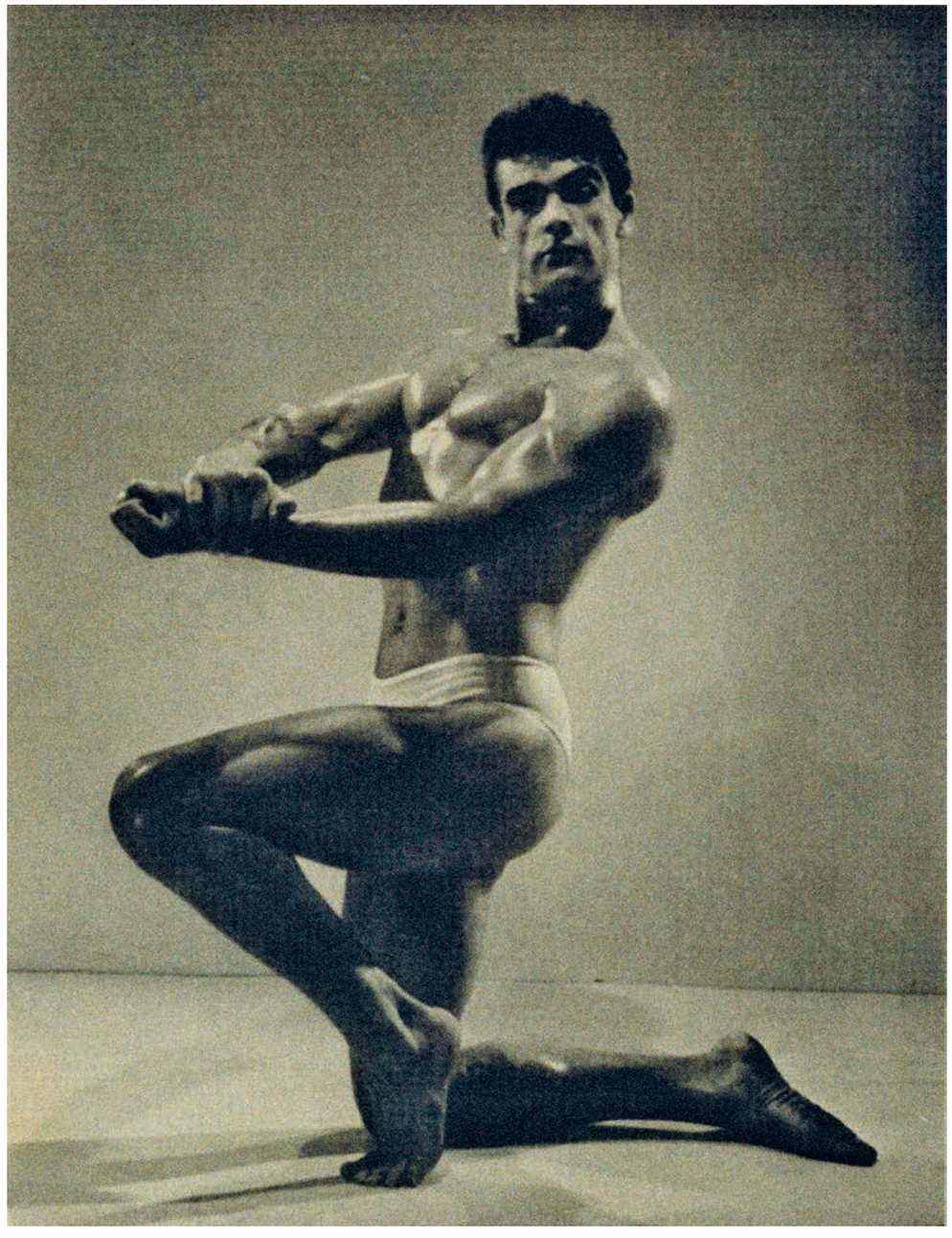
As conventional methods fail them, people anxiously seek alternative treatments; ancient Chinese practices are gaining in popularity, if not in effectiveness. 'Cupping' is the technique that involves glass cups being heated and placed on the afflicted area, creating a vacuum to draw out the body's toxins, relieving the discomfort of a congestion of blood, or mucus, and improve circulation. Possibly, it may offer some relief to a few.

The problem of back pain is so widespread that many governments cite that bad backs are making a significant impact on their economy, with productivity problems caused by many days lost to sick leave for sufferers.

However troublesome it may be for the economy, clearly it is big business for hundreds of writers and publishers, guaranteed an endless supply of eager readers trying to make peace with their back.

Desperate people with aching spines will buy just about any book on the subject that you may care to produce. If you are sitting comfortably, start writing *My Ten Step Guide To Wise Walking* today, and prepare to retire on your royalties.

Note: The bad back being attended to in the preceding photograph belongs to an animatronic robot being serviced by Disneyland workers in 1964.



SEAN CONNERY at the casting session for the first JAMES Bond film.

Before auditioning for Bond, Sean Connery held a number of jobs from lorry driver to coffin polisher, but earned most as an artists' model at Edinburgh College of Art.

One student described him as *"too, too beautiful for words, a virtual Adonis,"* which Connery took as inspiration to hone his muscles as a body builder, even competing in Mr Universe in 1953.

Whilst Connery epitomises most fans' quintessential Bond, with his undeniable good looks, toned physique, and Scottish charm, he is actually some distance away from creator Ian Fleming's original vision for his 007.

Fleming wrote that Bond should be an indistinct man. As a spy, being inconspicuous is an obvious advantage, and he also gave his character the dullest name he could think of.

James Bond was the name of an ornithologist whose book on exotic birds Fleming had been flicking through, and it struck him as blunt, unromantic, Anglo-Saxon, yet satisfyingly masculine.

Bond's character would reflect his name; a straightforward, neutral, Ministry of Defence tool, to whom exciting things seemed to happen, but who himself wasn't worth a second glance.

Connery failed to perform this function, and instead became the man other men wanted to be and women wanted to be with, and has topped polls for Sexiest Man Alive and Sexiest Man of the Century, even at age 69.

But during the Second World War, Bond-like characteristics of charm and celebrity were desirable qualities for potential spies:

Hollywood sirens Marlene Dietrich, Greta Garbo, and Audrey Hepburn were all involved in espionage in the war effort.

Berlin born Dietrich was firmly against Nazism and recorded American propaganda in German to help with Allied efforts; Garbo was recruited by film director Alexander Korda who acted as middleman between the British secret service and the celebrities they wanted on board.

Garbo performed as a go-between for the British secret service and members of the Swedish royal family, seemingly transforming into Mata Hari, the celebrated dancer-come-spy whose part she had played in a film.

Hepburn, whilst a pre-teen ballerina in neutral Holland, worked as an agent for the Dutch Resistance, taking part in secret 'black ballets' to raise money for the rebels working against Hitler.

Another celebrity spy was children's author Roald Dahl, an unlikely candidate as he was known by friends to be "unable to keep his mouth shut and gossiped like a girl".

During WWII Dahl was a decorated fighter pilot for the RAF until an injury sustained from a crash in 1940 left him unable to fly, and he was bound to a desk job as Assistant Air Attaché in Washington D.C.

Like Bond, Dahl was a dashing and affable man who was able to infiltrate social circles, charming many, especially women.

His skills caught the eye of Sir William Stephenson, a Canadian heading up the British Secret Service in America who quickly recruited him.

His mission was to report information from Washington back to London; at the time the British were particularly concerned that the Americans were not going to join the war effort, and Dahl's task was to help combat the 'America First' movement, established in 1940 for those wishing to stay out of the war.

In the main, Dahl carried out his duties by attending the most glittering of parties, befriending wealthy Americans, and bedding their wives (all in the name of England, of course). He was able

to pinpoint those opposed to the Allies and determine effective ways to influence, or undermine them.

Antoinette Marsh, daughter of a Texas newspaper baron said, "he slept with everybody on the East and West Coasts who had more than $50,000 a year".

His 'spywork' paid off, and he even managed to pass on valuable stolen documents. His desk job was sufficiently dull that it also helped him to discover his love of writing, albeit whilst devising British propaganda for American newspapers.

Dahl's recruiter William Stephenson was a most interesting spymaster, rumoured to have been great inspiration for Fleming's inception of James Bond. Fleming, like Dahl, worked with him in America during the war.

Stephenson, known by codename 'Intrepid', became a wealthy businessman in the interwar years when he redesigned and patented a German can opener he found in a POW camp during WWI. By the outbreak of WWII he had also patented a system for transmitting photographs via wireless, excelled in radio, aircraft, and car manufacturing, dabbled in construction, and owned Shepperton Studios, the largest film studios in the world outside of Hollywood.

Stephenson's extensive contacts, funds, and technology meant that he was able to provide confidential information to Winston Churchill about Hitler's violation of the Treaty of Versailles as early as 1936, and was one of the PM's most trusted advisors.

In 1940, Churchill sent Stephenson to America, a year before their entry into the war, to covertly run MI6 Operations from the less than covert 35th and 36th floors of the Rockefeller Centre, New York, under the guise of British Passport Control Officer.

As the operation was unfunded, Stephenson also paid for much of the staff and expenses out of his own pocket.

Stephenson set up Camp X in Ontario, a unique spy-school where 2,000 Brits, Canadians, and Americans were trained in espionage.

Camp X produced five future directors of what would become the CIA.



A pleasant swim.

A LIGHT SNACK.

One of the most iconic of musical themes, the opening bars from *Jaws*, always swirls around the brain at the sight of a picture like this – the automatic reaction to any image of a cruising shark.

The hair-raising chords are even used during the Oscar ceremony to warn those on stage that their time is up, their acceptance speech is overrunning, and they should make a dignified exit.

Jaws is still remembered as one of the most terrifying pieces of cinema.

Combining nerve-wracking suspense and the spectacle of swimmers being chomped apart by razor teeth, there was no respite for audiences who were willing to suspend disbelief – despite the ham-fisted fakery of the studio-workshop-created shark.

The film was released in 1975, and quickly became the highest grossing movie of all time.

The story was popularised as a novel before director Steven Spielberg bought the film rights, and was based on the legendary shark hunter, Frank Mundus.

His ‘monster fishing’ trips had become renowned across the USA; when he harpooned a Great White weighing in at 4,500 pounds it earned him picture coverage across newspapers, television and magazines, followed by Hollywood immortalisation.

Later in life he became a vocal conservationist, and campaigned vigorously for the protection of sealife. Perversly his fame and the film’s worldwide success had the disturbing effect of encouraging shark hunting.

There are, in fact, few shark attacks on humans each year.

However, in South Africa they are on a steady rise, albeit through human intervention.

One of the biggest growth sectors in the Cape Town tourist industry is cage diving. For a large fee, tourists can be enclosed in a steel-barred cage, and dropped into shark-infested waters.

The skill it takes to attract a shark is unsubtle. 'Chumming' is used by the cage operators to lure sharks into range, a technique that consists of lacing the sea with barrels of blood and guts – making diving in the cage an even more dubious pleasure.

Chumming has come under fire from surfers and swimmers across the region as the reason for the upsurge in fatal attacks.

Between 1905 and 1990 there were 31 shark assaults on humans between Cape Town and Port St Johns, with one single fatality.

Since 1991 there have been 94 shark attacks, with sixteen victims killed.

The belief amongst specialists is that feeding associated with human proximity brings the sharks further into shore where they are more likely to encounter us.

Further concern is that with their migratory patterns influenced by chumming, they could bring their newly acquired attraction to humans to the popular tourist seas around Australia, Bali and Thailand.

It is somewhat unfair to the shark population that they have been made such totems of fear. Their biology fascinates the scientific community and has yielded many riches.

In 1993 scientists discovered a compound in shark tissue that research discovered could combat a series of deadly viruses found in humans, such as Dengue Fever and Hepatitis.

Now known as squalamine, the compound is in trials as a cancer treatment, and heralds new hope in the quest to fight viruses.

Whereas bacterial infections can be treated with antibiotics, many lethal viruses remain virulent and generally untreatable.

Many now believe that the powerful substance could be the secret to the shark's continued success as a species.

The explosion in pharmaceutical activity during the past century has been driven by the unearthing of compounds in plants and organisms found in the rainforests, and across many parts of the planet.

As the discoveries slowed by the 1970s, attention was focussed onto the oceans.

Given the biodiversity of the seas, and the environmental extremes that its inhabitants need to cope with – lack of light, low temperatures and fluctuating atmospheric pressure, scientists hope that the ocean will yield many advances in the treatment of diseases.

Compounds from ocean snails have been used as a muscle relaxant, those from stonefish to lower blood pressure, and sea anemones have been used to make a heart stimulant.

Overfishing poses a daunting threat to the continuance of these discoveries.

The fall in shark numbers directly effects the general food chain and the survival of coral reefs, leading to a wide number of interconnected species becoming vulnerable.

Many of the world's fish are being harvested faster than they can reproduce, and 90% of many of the ocean's larger inhabitants, such as tuna and swordfish have largely gone.

Some scientists have expressed the fear that if current consumption patterns remain unchanged, world fisheries could collapse entirely by 2050.

The greatest tragedy of contemporary fishing techniques is 'bycatch', fish caught unintentionally while trapping more desirable species.

It is estimated that up to 25% of fish caught are discarded, 27 million tonnes a year. These are the dolphins, turtles, starfish, juvenile fish – all dumped back in the sea dead or dying because they lack commercial value.



You grow 120 feet of hair, and swallow a litre of nasal mucus. EVERY DAY.

You are not the alien from *Alien*.

You are an average member of mankind going about your normal day.

Your body produces so much nasal mucus, snot if you prefer, for three thoughtful reasons:

1. It traps particles of dust and other debris in the air you inhale.
2. It humidifies the air entering your lungs.
3. It warms the air entering your lungs to the desirable level.

Mucus is endlessly manufactured during the day, and swallowed, swept to the back of your mouth by millions of microscopic hair-like cilia.

The average person, not a bald one however, has about 100,000 hairs on their head.

Each hair actively grows by about 0.5mm a day.

Even I can do the mathematics as long as I have a calculator, and prove that in total hair grows by well over 120 feet per day.

If you are particularly full-headed your hair can grow by 6 feet in an hour. But so that we don't end up visiting the barber many times each day, all this growth means is that your hairs' overall length increases by about half an inch each month.

Human hair is exceptionally strong – comparable to iron wire; if I were to make a short rope out of the hair on your head, it could support the weight of two African elephants.

During the Renaissance, women, including the Mona Lisa, plucked out their eyebrows entirely because it was fashionable at the time to present a large forehead.

Even if you are fastidiously hygienic, you will be alarmed to know that tiny mites live in the back of your eyelashes.

They emerge when you sleep and eat the cells your eyelashes shed, helping your lashes to grow by preventing hair follicles from clogging.

Red hair crowns the heads of four percent of the world's population. Only 2% of Americans are natural redheads, whereas 13% of Scotland's inhabitants have red hair, and 10% of Ireland's, the highest percentages on Earth.

In Ancient Rome, where hair styling became widely popular, high ranking women tinted their hair red as it was considered impeccably regal.



The Accolade by Edmund Leighton, 1901.

In Ancient Greece, curly red hair was highly desirable and they created the first heated curling tongs.

But redheads have historically endured high levels of persecution.

In Germanic culture, red hair was seen as an indicator that you were a witch, particularly if linked to freckles, another 'Mark of the Devil'.

75,000 red-headed women were burned at the stake or drowned in the Middle Ages.

There was one group of people to whom redheads were sacred; the Pre-Raphaelite painters celebrated their flame haired muses, with their alabaster complexions and waist-length tresses.

The 19th century model Elizabeth Siddal posed for a number of artists in the group, but her most familiar role as Ophelia, for Millais, required her to lie in a cold bath for days, eventually falling victim to pneumonia.

She recovered and married a leading painter of the movement, Rossetti, who made her the star of his most prominent works.

Personally, I cannot be doing with that Pre-Raphaelite frippery.

If you like paintings of redheads, you are not going to find better than a Klimt, unless it's a Botticelli.

Facial hair on men has received mixed reviews; you would have to pay a special luxury tax to wear a beard in Russia under Peter the Great, whereas to Ancient Egyptians a beard was seen as an indication of personal neglect.

Cavemen were obviously keen to present a clean-cut appearance; sharpened rocks, shells, and flints were used to scrape off hair from the face and head.

And before mankind congratulates itself for having evolved so magnificently, bear in mind that today we still have the same number of hair follicles as a chimpanzee.



MAX FACTOR applying MAKEUP using his BEAUTY MICROMETER.

Maksymilian Faktorowicz was a Polish born, American based cosmetician who made his name reinventing stage cosmetics, working with the most renowned actresses of Hollywood's glory days in the 1930s.

He is also credited with originating the term 'makeup'. His 'Beauty Micrometer' was devised to analyze facial flaws scientifically; the peculiar and uncomfortable looking device claimed to accurately register facial measurements, and disclose to an experienced operator which features should be reduced or enhanced.

In practical terms, the Beauty Micrometer was made up of flexible metal strips held in place by sets of screws, allowing for 325 possible adjustments. The instrument was so accurate it was able to detect those tiny flaws that escape ordinary observation.

The nose you believed to be straight was in fact slightly crooked, so would require some concealing work. "The flaws you know you have are not nearly all you possess" according to perfectionist Max, and he went on to charmingly point out "you are much more flawed than you realise".

Other than his Beauty Micrometer, Factor had more pioneering, mathematically minded inventions for beauty measurement and improving upon the work of nature. 'Hangover Heaven' was one of these – a full-face bonnet adorned with frozen plastic ice cubes, designed to refresh the face without disturbing makeup.

In the early 20th century other people also had ideas about marrying mechanical engineering and beauty, including the predecessor to rhinoplasty, the 'Trados Nose-Shaper' whose tagline was: "You have a beautiful face... But your nose?"

Then, in 1938, the year of Max Factor's death, Isabella Rochester invented a 'Dimple Maker', which strapped around the wearer's head with two tiny metal knobs that pressed firmly into cheeks to gradually create dimples. Doctors at the time were alarmed at the invention, saying that not only would it fail to create real dimples, but could cause cancer with prolonged use.

According to the Ancient Greeks, 'all beauty is mathematics'. A face, a body or even a building was perceived as more attractive if it was symmetrical and in proportion. Leonardo da Vinci's Vitruvian Man illustrates the 'Golden Ratio' for the ideal human body.

In the same vein came the 'MBA' or 'Marquardt's Beauty Analysis', putting into practice the research of Maxillofacial surgeon Dr Stephen Marquardt. The MBA created a device based on the Golden Ratio which can be overlayed on to a photograph of a face to mathematically determine flaws, and suggest solutions – although perhaps under the surgeon's knife rather than the foundation brush.

The MBA credits beauty so highly, they pronounce that using their technology, enhanced attractiveness can empower individuals to gain positive control over their own lives and fates.

In modern day Japan products that Max Factor initiated in the 1930s have moved on, and Japanese women are very familiar with the nose clip to train cartilage into a desired shape, and the double eyelid clipper to create perfect Western eyelid creases. These contraptions are reminiscent of less voluntary aids to perfect womanhood, which were imposed upon the wearer rather than self-inflicted.

In Medieval England women could be punished for crimes such as bickering or having a miscarriage, and punishments ranged from being paraded around naked in the streets, to facing the claws of the Breast Ripper, the function of which was self-explanatory. Looking like a very large, sharp pair of salad tongs, the torture device was used hot or cold and in an inquisitory nature on women condemned of heresy, blasphemy or adultery, amongst other misdeeds.

Bearing the closest resemblance to the Beauty Micrometer however is the 'Scold's Bridle', sometimes referred to as 'the branks.' The Scold's Bridle was an iron muzzle in an iron framework that enclosed the head. It also pressed down on the tongue inside the mouth, making speech impossible. Its first recorded use was in Scotland in 1567, most commonly inflicted on women seen as witches, or shrews. The Bridle was designed as a minor punishment for women of the lower classes whose speech was nagging, noisy or troublesome; the wearer was paraded in public for additional humiliation and the verbal abuse of passersby. Its popularity grew and quickly spread throughout England.

Women's struggle to be allowed free emotional range continued well into the 19th century. 'Female hysteria' was a common medical diagnosis for symptoms including faintness, nervousness, sexual desire, insomnia, loss of appetite for food, or sex, and a tendency to 'cause trouble', all thought to be brought on by the stresses of modern life for civilised women.

A common cure for female hysteria was the 'Rest Cure', pioneered by Dr Silas Weir Mitchell in the second half of the 19th century. The rest cure involved no reading, moving, talking, or using the imagination in any discernable way for six to eight weeks, and was used to keep patients out of asylums.

In popular culture, the Beauty Micrometer seems to be have inspired a disturbing scene in the film *A Clockwork Orange*. The specula used to force open the wearer's eyes when under the fictional aversion therapy, bears a likeness to Max Factor's headgear to maximise beauty.

Alex, the protagonist is forced to watch shockingly disturbing images while being administered nausea inducing drugs. The aim of the therapy is to make the patient experience vomiting fits if simply thinking about committing a violent act.

The side effects of this would undoubtedly be rather saggy skin around the eyes, which Max Factor would certainly not approve of. He might however enjoy knowing that his pioneering beauty aids ended up improving the behaviour of recalcitrant thugs.





The STATUE of LIBERTY at HOME in PARIS.

The Statue of Liberty came to encapsulate the USA as a bastion of freedom, a welcoming home for those fleeing oppression and the old world. Reality might have shaken those noble sentiments over the passing decades, but the statue still stands tall as the most iconic in the world, a remarkable gift from the people of France.

The historical relationship between France and the USA began during the War of Independence when the French lent support to the patriots battling to free the nation from the clutches of the British.

France, of course, has just as bloody a history of colonialism as Britain, and their intervention was less about chivalry, less about altruistically helping the freedom fighters, rather more about a sustained effort to seriously weaken their traditional rival.

Years after independence was won, an idealist dream was hatched to create a monument that would celebrate liberty in the nation the French felt they had helped co-develop.

Frédéric Bartholdi, an artist with a penchant for scale, designed the statue; previous works include a monumental lion, and a proposed lighthouse in the form of an early Egyptian peasant holding a torch aloft at the entrance to the Suez Canal.

He was inspired by one of the greatest structures of the Ancient World, the Colossus of Rhodes, the bronze dedicated to the sun god, standing splay-legged over the harbour of the city carrying a light to guide ships.



It loomed over 30 metres high, but was destroyed by an earthquake and never rebuilt; the locals believing they had angered the god.

Bartholdi's energy and ambition drove the project over the many years it took to complete the statue's construction in Paris and installation in New York. Liberty was chosen as the appropriate figurehead as she had already been used on U.S. coins.

The face for the statue was based on Bartholdi's mother, and the overall form designed to be as simple and graphic as possible, constructed from beaten copper sheets attached to an inner armature.

The hand grasping a flaming torch was the first section to be completed, and this went on tour in the U.S. to help with fundraising, whilst the finished head went on display at the Paris World Fair. The work was so long in the making that the initial engineer died, so Bartholdi brought on board the great Alexandre-Gustave Eiffel, also a believer in the maxim that biggest is best.

Funding issues continued to beset the project, and many creative ways of raising cash were initiated; charging the public to come and view the workshops, tours inside finished parts of the structure, selling miniature terracotta versions of the statue. (One of these models sold in auction at Christie's in 2007 for $144,000.)

Sourcing high levels of finance in the USA was going poorly following an economic decline, and the problem was exacerbated by a municipal preference for monuments of historical revolutionary figures, rather than metaphorical ones such as Liberty.

Finally, micro-funding conducted both in France and the U.S. won the day, with both schoolchildren and the elderly dipping into their savings to make many donations of small sums – evidence that the statue had captured the imagination of the public.

The dedication of the sculpture finally took place in 1886, eleven years after the first announcement of its construction.

A marching band and procession toured the city of New York, prompting city bankers to throw ticker tape out of their windows when they passed through Wall Street, inaugurating the New York tradition of ticker tape parades.

Franco–U.S. relations have soured a little since that glorious moment. Restaurants around the country changed the name of 'French Fries' to 'Freedom Fries' in the wake of 9/11, when the French failed to fully support the 'war on terror' or the invasion of Iraq. Many Americans felt betrayed that France had so quickly forgotten the many American soldiers who had given their lives to save France from the Nazis in World War II.

With material technology making great advances in the past 100 years, it should come as no surprise that recent efforts in monumental sculpting have surpassed those of Eiffel and Bartholdi.

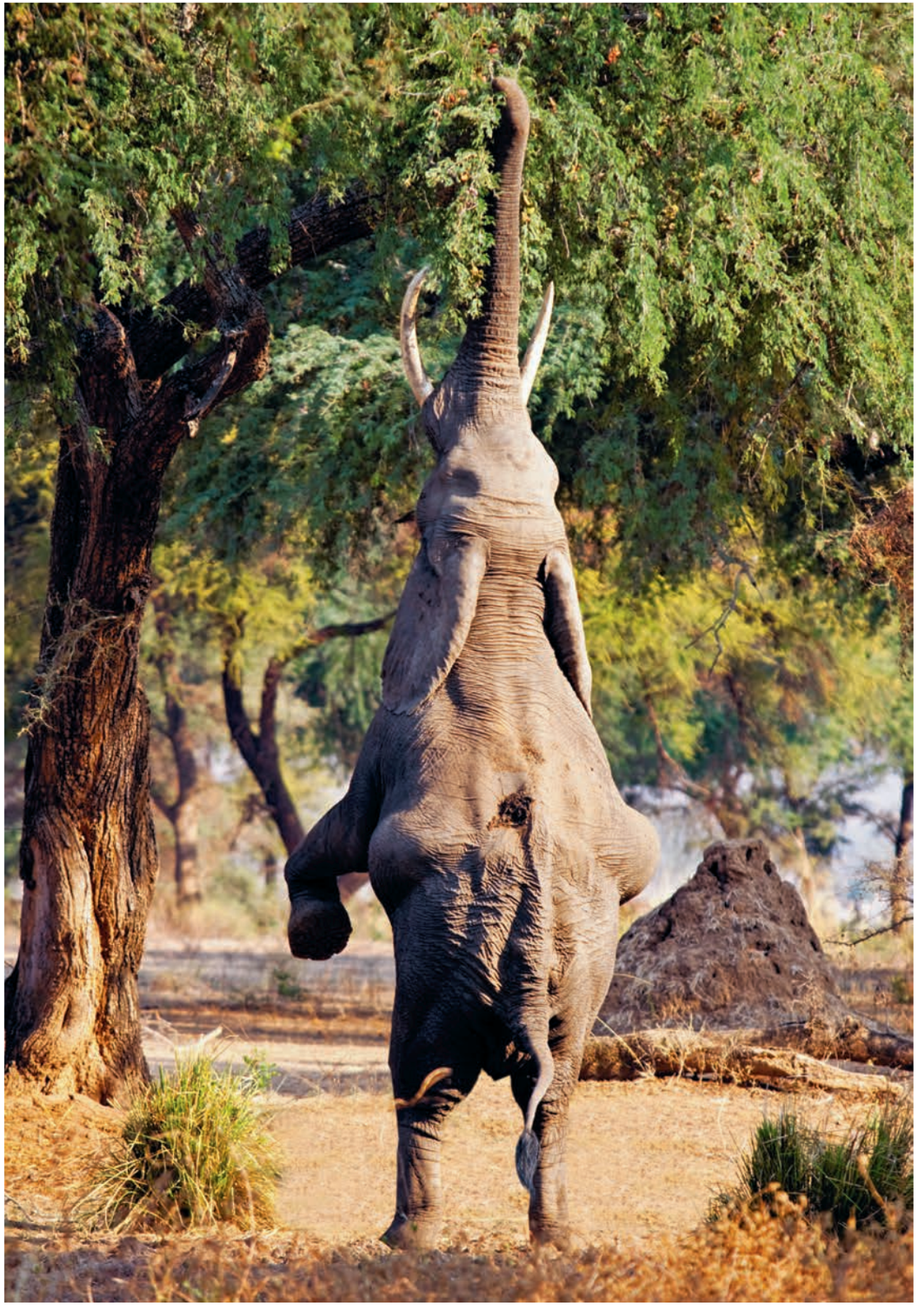
Looking eastwards to China, Japan, and Burma, you will find some of the most staggering figurative structures ever to have been built.

The Spring Temple Buddha in Henan, China rises 128m. This vast work was completed in 2002, built around a hot spring that gushes at 60c and said to have profound healing properties.

The sculpture was created in response to the Taliban bombing the Buddhas of Bamiyan in 2001. The sacred Buddha constructions were hewn directly into sandstone cliffs in central Afghanistan in 507AD.

Measuring between 35m and 55m in height, these remarkable figures stood at the crossroads of the Silk Road, a centre for Buddhist belief and worship, incorporating over ten temples and housing more than a thousand monks, before they were destroyed.

Today of course the destruction of the Statue of Liberty is a stalwart of Hollywood movies set in a post-apocalyptic world – buried alongside a forlorn, flooded, frozen-over, or fried-to-a-crisp Manhattan. Liberty's torch is always seen peeking through the desolation, as the most poignant symbol of mankind's fall from grace.



EAT like an ELEPHANT.

Exercise while you dine.

However, only the most delicious of morsels could possibly induce an elephant to extend every available part of its body in such an almighty stretch; clearly there must be something particularly tasty on the topmost branches of this tree.

A large bull elephant can reach over 24 feet in height, a valuable skill in drought conditions when the bottom layers of a tree have been stripped bare.

Eating is one of the chief activities of an African elephant's life.

Constant grazing is needed to consume the 660 pounds of vegetation its great bulk requires each day.

Elephants in Russia have discovered rather a different appetite.

During a cold snap in the winter of 2012 a Polish circus was travelling through Siberia, when the wooden coaches transporting their elephants caught fire. The elephants were rushed out to safety – and into the -40 degrees cold. They started to get frostbite on their ears and were struggling with the chill when their enterprising trainer came up with a helpful solution. He decided to warm them by mixing many bottles of vodka with hot water, and offered it to the freezing elephants.

The creatures bellowed and stamped their feet in approval, certainly drinking as much of the cocktail as they could, and survived the ordeal.

Elephants are admired as one of nature's best-designed creatures. Their magnificent combination of sheer size, huge fanned ears and noble trunk has ensured that they have stood unchallenged in the animal kingdom; their only predator is man. Indeed, both the African and Asian elephant are the only two surviving species of a prehistoric group of large mammals. Their cousins, the strange looking Manatee sea cows, flourished

by migrating to the warm waters of sunny areas of the world; they particularly like the sea around Florida.

Mankind has much to thank the elephant for. Stretching back 10,000 years, it was the Woolly Mammoth whose great size and protein-packed fatty flesh enabled hunters in primitive societies to feed their families for months. Many scientists believe that the hearty diet offered by these lumbering herds was enough to help accelerate human evolution. Though now extinct, mammoth remains continue to be searched for today.

In the northernmost reaches of Siberia men brave the biting cold, and polar bear attacks, to hunt for mammoth tusks. Their white tips can increasingly be seen poking from the earth when parts of the region defrost. These gargantuan ivory tusks sometimes reach over 2 metres in length and can be as thick as a tree trunk.

Highly prized across Asia, particularly in China where 90% of the tusks are transported, they can fetch $60,000 at market, enough to keep hunters and their families fed and housed for a year.

More profit is to be made at the end of the supply chain, however.

Traditional craftsmen in China can spend over two years on one tusk, carving intricate figures of men and women, animals, trees, and mountains out of the ivory. A foot long piece created by one of the masters recently sold for $1.1 million.

The trade in mammoth ivory was encouraged in the hope that it would undercut the illegal elephant ivory market.

The 1980s were the heyday for poachers selling tusks from animals as diverse as elephants and rhinos to narwhales.

Elephant populations in Africa were particularly badly hit, with an estimated 1.3 million across 37 countries being savagely reduced to 600,000 by 1989, to support an ivory trade worth $1 billion.

In 1990 a ban was placed on ivory sales; this led to endless wrangling over existing stockpiles. Worse, instability in many nations with elephant herds led to military conflicts, that itself led to a consequent need to sell ivory to pay for weapons.

Even now, the ban is patchy in its success. The demand for ivory from an increasingly wealthy China has led to poachers becoming tempted by greed, and the illegal trade of elephant ivory is once more on the rise.

Likewise, the killing of rhino has increased by staggering proportions between 2007 and 2011.

Skin, bones, teeth and claws of 1,400 wild tigers were confiscated between 2000 and 2010; given that there are only an estimated 3,200 left in the wild, this is a horrific reminder of the velocity at which man hurtles many creatures towards extinction.

But there may yet be some hope for the most endangered of species, with a *Jurassic Park* future nearer to reality than we would think.

New work by scientists across the world experimenting with genetics have brought the notion of resurrecting beasts such as the Woolly Mammoth and the Sabre-toothed tiger closer to realisation.

In 2003 a team of specialists managed to revive a type of extinct Ibex.

They emptied a goat egg of its DNA, implanted nuclei from the Ibex, and placed them in surrogate mothers. Of the seven pregnancies, six ended in miscarriage. One managed to make it to birth, albeit by c-section, but died after ten minutes struggling for breath.

Not a great deal to celebrate yet, but nevertheless an important step for the scientific community working towards de-extinction. They firmly believe that the consequent technological advances they made have brought them even closer.

The question remains for sceptics – people who would be considered Luddites by the true geneticist – is not whether scientists will be successful, or how, but why they are doing it, and indeed if they should.

The Luddite view? Money would be better spent on protecting those animals we do have, and not bringing back those we don't.

Personally, I loved *Jurassic Park*.



Bill Gates, CRIMINAL MASTERMIND.

Bill Gates wasn't always famous for being a technological genius, and the world's richest man. He was also well-known in Albuquerque in police circles, having been arrested as early as 1975 when he was apprehended for driving too fast and without a licence. He was arrested again in 1977 when he ran a stop sign, and still had no licence.

The list of notable people with criminal records is a surprisingly lengthy one.

Besides the most obvious ones like Nelson Mandela and Martin Luther King, many other great men throughout history have also borne this burden.

Socrates was found guilty and sentenced to death for refusing to recognise the gods acknowledged by the state.

Galileo Galilei was tried and convicted for his heretical opinion that the Earth orbits the Sun.

In 1922, Mahatma Gandhi was sentenced to six years for sedition, but released after two years because he required a difficult appendicitis operation.

Marco Polo was serving time in prison when he wrote a book that inspired Christopher Columbus to discover America.

If you are a student of the mug-shot photographs of arrested film and music celebrities, you will have discovered a magnificent collection of official pictures; they remain forever in police archives whether a conviction followed or not.

George Clooney, Stevie Wonder, Mick Jagger, Keith Richards, Matthew McConaughey, Jane Fonda, Frank Sinatra, Al Pacino, Robert Downey Jr., Randy Travis, Johnny Carson, Nicholas Cage, Daryl Hannah, Prince, Jim Morrison, Janis Joplin, Ryan O'Neal,



Jail prisoner Mahatma Gandhi.

Lenny Bruce, Willie Nelson, Paris Hilton, Woody Harrelson, Johnny Cash, Jimi Hendrix, John Lennon, Larry King, Steve McQueen, Elvis Presley, Keanu Reeves, Hugh Grant, Kiefer Sutherland, Mickey Rourke, Zsa Zsa Gabor, Eminem, Nick Nolte, Mel Gibson, Josh Brolin, Tim Allen, Kurt Cobain, Dennis Hopper, Christian Slater, Shia LeBeouf, David Bowie, James Brown, Jennifer Lopez, Vince Vaughn, Winona Ryder, were all captured, if only by police photographers.

You could add a distinguished note to your roll call of the arrested by including Ezra Pound, Leon Trotsky, Rev. Jesse Jackson, Joseph Stalin, many U.S. Senators and Congressmen, many British Members of Parliament. And Jesus.

Superbly rich and successful business leaders are often on lists of prison inmates.

But my favourites of the billionaires are obviously the honest, but ill-educated ones – the hopelessly weak students who were school dropouts.

Amancio Ortega, the richest man in Spain, with a global empire of leading fashion outlets, gave up on classrooms at age 14, and started his career by running errands for local stores.

Francois Pinault, one of France's most celebrated tycoons who owns Gucci, Christie's auction house, and a roster of international brands including Samsonite and Puma, left high school with low grades to work in his father's lumber mill.

Carl Linder Jr. abandoned school as early as was legal to deliver milk for a dairy. He ended up buying United Fruit, formed it into global giant Chiquita Brands, and is now worth about $2 billion.

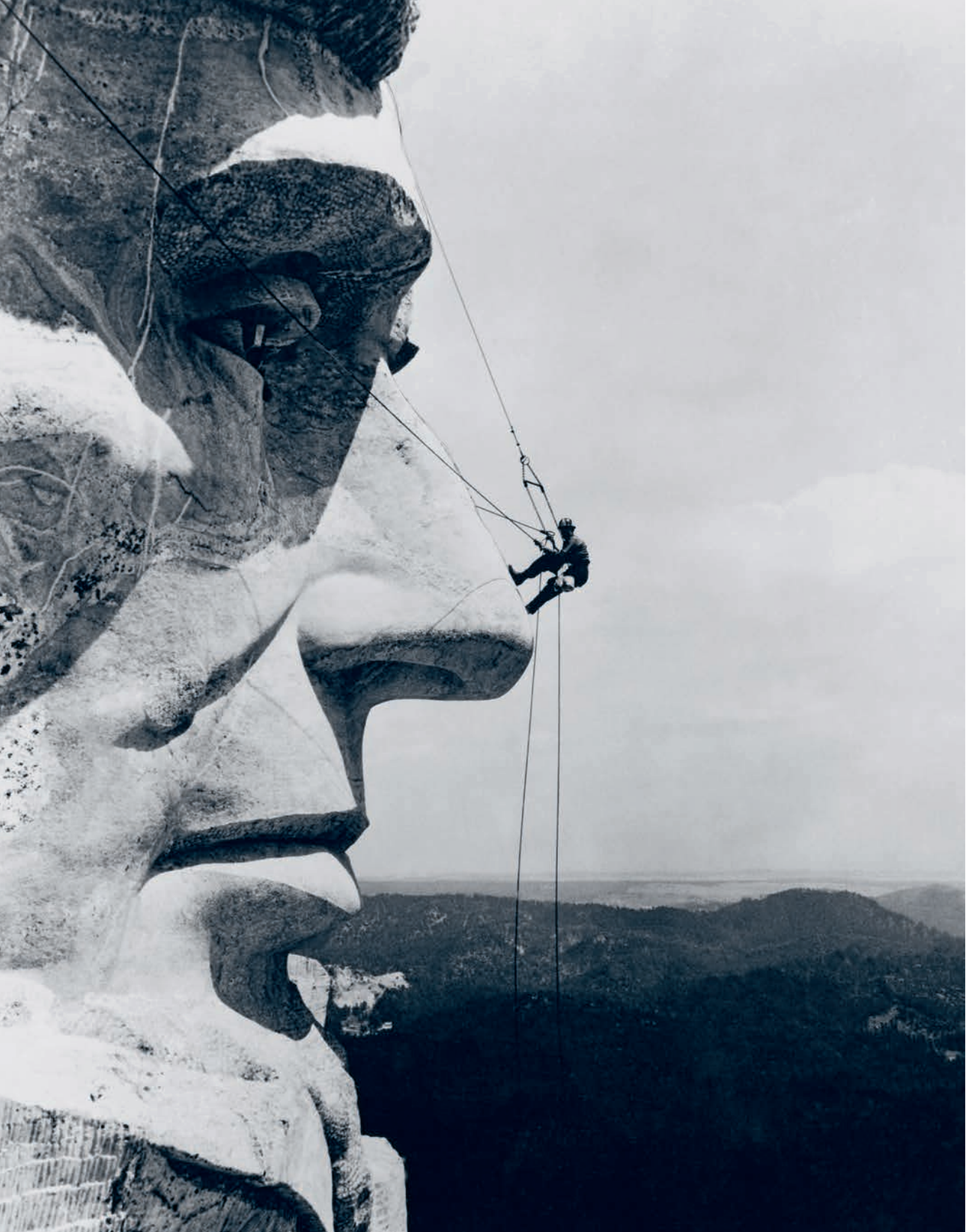
Walt Disney left school at 16, but even his imagination wasn't vivid enough to foresee his Disney company would grow to have annual revenues of $30 billion.

Thomas Edison was considered too scatterbrained for school and his teachers told him to leave as early as possible. Edison's work as a scientist and inventor are legendary, and he founded General Electric in 1890, still one of the world's most notable companies.

Richard Branson abandoned a school career at age 16. By 24 he had bought 79 acres of Caribbean islands, and has now built the Virgin Group into a brand with 360 companies.

But Henry Ford didn't even have the luxury of being a school failure; his family was too poor to let him enter school and he had to seek work instead.

He had never seen the inside of a classroom when he founded Ford Motor Company.



He's KEEPING his NOSE CLEAN.

I have only seen the Mount Rushmore Memorial in the dramatic finale of Alfred Hitchcock's 1959 movie *North by Northwest*.

It's hard to decide which was the most beautiful: Cary Grant, Eva Marie Saint (whom he saved as she dangled from the sculpture of George Washington's face), or the magnificent memorial itself.

The heads of America's great Presidents Thomas Jefferson, Theodore Roosevelt, Abraham Lincoln and George Washington were carved into the granite face of Mount Rushmore in South Dakota's Black Hills; each face is 60 feet high.

Originally conceived as a tourist promotion for the area, construction began in 1927.

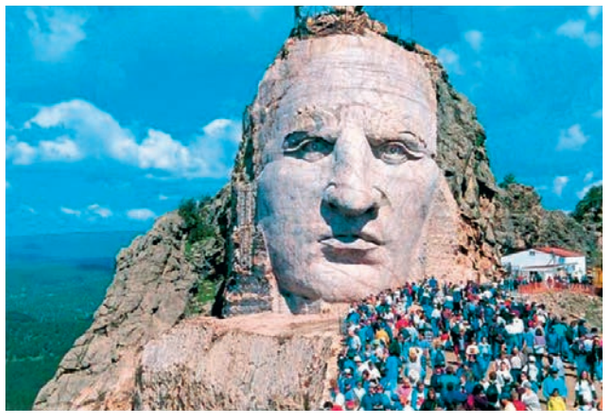
Funding from the Federal government was quickly overspent, and the plan to have each statue depicting a head-to-waist portrait was abandoned.

Gutzon Borglum, a Danish-American, his son Lincoln, and 400 workers carved the sculpture, first using dynamite to blast away 450,000 tons of rock.

It was a hazardous construction task lasting 14 years, but with no fatalities on the site throughout the entire period.

The original scheme to promote tourism to South Dakota turned into a triumph – three million visitors are still attracted annually.

Controversy over the site also continues among Native American Indians, who argue that the U.S. seized the area from the Lakota Tribe after the Great Sioux War of 1876.



The Chief Crazy Horse Memorial, South Dakota.

But that in a treaty signed in 1868 the Black Hills had been granted to the Lakota in perpetuity.

After the memorial was occupied by the Native Indian Movement in 1971, their cause became so potent, it gained enough support for construction to begin on the Crazy Horse Memorial, celebrating the great chief nearby in the Black Hills, at an even bigger scale than Rushmore.

The Native objections were also furthered by the controversy about Guzton Borglum being a senior member of the Ku Klux Klan.

As a comparison, the Great Pyramid of Giza in Egypt was completed in just ten years, though it required an estimated workforce of 50,000.

If Hollywood's Biblical epics are to be used as conclusive evidence, the slaves building the sculpture were encouraged to work hard and for long hours in the burning sun, by being whipped by cruel taskmasters.

They had to haul 2 million blocks of granite, each weighing 1.5 tons, using a remarkably sophisticated technology.

Analyst Dr Craig Smith, whose team conducted an exhaustive study of the Pyramid's creation stated:

"The logistics of construction at the Giza site are staggering when you think that the ancient Egyptians had no pulleys, no wheels, and no iron tools.

Yet, the dimensions of the pyramid are extremely precise and the site was leveled within a fraction of an inch over the entire 13.1 acre base.

This is comparable to the accuracy possible with modern construction methods and laser leveling.

Astoundingly, with their rudimentary equipment the pyramid builders of ancient Egypt were about as exact as we are today with 20th century technology."

Perhaps we could revisit the use of brutal taskmasters, brandishing heavy whips over the backs of the builders, plumbers, carpenters, electricians we rely on, to complete even the simplest of renovations on time, and on budget...

Note: To celebrate Independence Day in 2005, the National Park Service commissioned the full-scale cleaning of the Presidents' faces on Mt. Rushmore.

The aim was to remove lichen, algae, moss, and widespread organic stains – but only by using water without chemical additives.

Hot water pressure washers with rotary nozzles were used by cleaners who abseiled down and across the faces, using a complex array of cables.

The team completed the task in just three weeks, nobody was injured, and Abraham Lincoln's nose never looked cleaner.



If you HATE traffic jams, you could always MOVE to North Korea.

It is a land of vast superhighways, some with as many as ten lanes.

But they are always empty; very few people own cars.

More of the population look after the roads than drive on them; dusting the tarmac, pruning the shrubs, cleaning the gutters, tending the grass, creating the most meticulously presented highway system in the world.

Across our planet 260 million people live in 30 giant cities.

In 25 years, 70% of the world's population will be living in megacities, or megalopolises as they are now to be known.

If you live in some of these cities, massive traffic jams are already commonplace. In São Paulo last year during a particularly severe road clog, jams reached 180km long during the busy parts of the week.

In Los Angeles the AO5 Freeway is so notorious for its gridlocks it is known as 'Carmageddon.'

In Moscow, where the giant roads were once traditionally empty of cars other than those belonging to party officials, immense traffic jams called 'probkas' condemn the vast number of drivers in present day Moscow to hours of delays. Double and triple parking is common, and police will regularly stop traffic flow entirely to allow a dignitary – a visiting President, or an illustrious VIP – to speed by.

It is hard for visitors to Mumbai or Beijing to determine which of the two cities has worst rush hour traffic problems.

Beijing is considered the more hazardous, as it is often blanketed in smog, caused by a sandwich of exhaust pipes and pollution from heavy local industry.

Mumbai is the more noisy, with its poor infrastructure leaving many roads pot-holed, with cars and trucks bouncing their way along every bumper-to-bumper journey accompanied by an incessant cacophony of beeping horns.

In North Korea, you will enjoy travelling in tranquility.

Cars are relatively rare; 70% of households use bicycles. There are trolleybuses and trams in urban centres, and earlier fleets were obtained in Europe and China, but the trade embargo has forced North Korea to build its own.

According to a recent North Korean news report, their population is the second happiest in the world, behind China.

They rated the citizens of Cuba, Iran and Venezuela as the next most contented.

They ranked South Korea as the 153rd happiest nation, and assessed that the least happy country in the world, placed bottom at 203, is the USA.

On the country's official webpage it declares that "The Democratic People's Republic of Korea is a genuine workers' state in which all the people are completely liberated from



Much official spontaneous weeping across North Korea at the loss of 'The Eternal Leader'.

exploitation and oppression. The workers, peasants, soldiers and intellectuals are the true masters of their destiny. The DPRK is the Juche-orientated socialist state which embodies the idea and leadership of comrade Kim Il-sung, the founder of the republic and the father of socialist Korea."

When he died in 1994 at age 82, a nationwide mourning period of ten days was declared by the new head of state, his son Kim Jong-il, and his funeral was attended by many hundreds of thousands of people flown from all over North Korea.

Mass weeping was encouraged, and the public were given flowers and wreaths to place around the 500 statues of Kim Il-sung scattered around the country.

It is now a tradition for all newlyweds, immediately after their wedding, to visit the nearest statue of the departed 'Eternal Leader' and lay flowers at his feet.

Under his leadership, the regime perpetrated over 1 million killings of its citizens in concentration camps, in forced labour, and in executions.

In mitigation, Kim would point out that his reign was a long one, dating back to 1948 – and that he was in power during the terms of office of seven Soviet leaders, ten U.S. Presidents, fourteen UK Prime Ministers and twenty-one Japanese Prime Ministers.

Although North Korea clearly has a keen dislike for America, their immediate neighbour South Korea is equally unpopular.

One of the best preserved forest areas on the planet is the strip of land that separates the two Koreas.

This can be explained by North Korea having placed one million landmines along the border, therefore leaving the woodland understandably free from any human activity.

Perhaps Kim Il-sung provided the world with a solution to one of mankind's greatest concerns – the wilful desecration of many of our planet's endangered rainforests.



CHILDREN were POSTED across AMERICA as STAMPED PARCELS in 1913.

UPS, the organisation that prides itself on being able to deliver your parcel anywhere on earth overnight, successfully transported two female whale sharks to the Georgia Aquarium in 2006.

The largest fish on the planet, whale sharks can grow to 40 foot long; it's not altogether surprising that a Boeing 747 freight airliner was required for the flight from Taiwan, with a brief stop in Alaska en route.

FedEx did not wish to be outdone by UBS, so in 2010 they shipped over 25,000 sea turtle eggs from Mexico to the Florida coast, to protect them from a recent oil spill.

Live animals are commonplace customers for mail shipment; African killer bees, boa constrictors, frogs, lobsters, worms, pandas, penguins, sea otters, eagles, a rhino, and an alligator have all been delivered by both organisations.

Dead animals are an equally popular item to mail. UPS have been alerted to dead pigs being transported by the smell of



In 1936, Post Office regulations stipulated that game, including rabbits, could be posted with nothing but a neck label as long as 'no liquid was likely to exude'.

decaying flesh emanating from the large parcels, and hunters like to post home the dead moose or stag they have slaughtered.

A more alarming problem for UPS was a shipment of chemicals designed to eat through concrete.

The container broke open and the chemicals started feasting on the concrete UPS floors.

Not to be trumped by their rivals, the two leading package transporters have delivered a shipment of 100,000 daffodils, large sections of the *Titanic*'s hull, a Sikorsky Black Hawk helicopter

needing repair, the 'Spirit of Liberty' Bell weighing 3,000lbs, and an eight-ton bronze statue of Jose Rizal, hero of the 1896 Filipino revolution against Spain.

Sending parcels via the U.S. Parcel Post Service began in 1913. Regulations stated that packages could not weigh more than 50lbs – but did not preclude the postage of young children.

The parents of four-year-old Mary Pierstorff mailed her from Idaho to her grandparents, as it was cheaper than buying her a train ticket.

The little girl wore 53 cents worth of postage stamps on her jacket as she travelled in the train's mail department.

After other parents took advantage of the service, the Postmaster General issued a regulation against sending children by mail.

Researchers wanted to test the delivery limits of UPS, and mailed a series of unusual items to record the results.

A twenty dollar note sealed in clear plastic was delivered safely.

A pair of high-end trainers alongside accompanying shoelaces were sent unwrapped, all simply strapped together with duct tape. They arrived with the laces neatly fitted into the shoe eyelets.

A rose with no box, just an address card tied to the stem, arrived with the rosebud intact.

A large wheel of rancid cheese was mailed in a flimsy cardboard box, with the oozing cheese emitting a truly foul odour. The box was placed sealed in a plastic bag before delivery.

A brick wrapped in plain brown paper was pulverised by the U.S. Drug Enforcement Agency, but all the pieces were delivered; similarly a box of sand sent in a transparent plastic box, had been opened, inspected, taped shut and sent on its way.

My favourite delivery was the successful transportation of a molar tooth. Mailed in a clear plastic box, it was repackaged, and the postage and address transferred to the outside of the new packaging.

A hand-written note inside read “Please be advised that human remains may not be transported through the mail, but we assumed this to be of sentimental value, and made an exception in this case.”

UPS was founded in 1907 by two teenagers with one bicycle and $100 borrowed from a friend.

They opened the American Messenger Company in the basement of a Seattle hotel.

At the time, delivering a telegram by hand was their prime business, with founders Claude Ryan and Jim Casey manning the phone, and their teenage friends cycling around dropping them off.

Over the years they acquired motorcycles and then delivery cars, and as many more people started to have telephones, trade expanded to service retail stores by delivering goods to their customer’s homes.

When they retired from the company in 1962 the organisation had grown across 31 States, with 22,000 workers.

Today it employs half a million people in 200 countries, and the business is valued in excess of $50 billion.

An equally uplifting tale of buccaneering entrepreneurship is that of FedEx, founded by Fred Smith.

He saved his fledgling company from collapse by taking the last $10,000 the business had left before the bailiffs arrived – to Las Vegas.

He had to try and win enough to continue deliveries until he could to find a financial backer for his little organisation.

It worked.





FEEL like a good CRY?

FETCH the TEAR CATCHER.

Want to cheer yourself up? Have a good cry.

There's a reason why 90% of people may become more content after shedding a few tears.

A study at the University of Minnesota into weeping noted that we may feel better after dissolving into tears – for the prosaic reason that we are 'crying it out'.

The chemicals that build up during emotional stress are released through our tear ducts when we weep.

They also pointed out that crying is part of mankind's inbuilt survival mechanism; unalleviated stress can increase the risk of heart attacks, or even damage certain parts of the brain.

It isn't merely observational analysis.

Prolactin is the hormone that is stress related, and plays a role in our immune system.

That's why women shed tears more often than men – they have more prolactin, and as levels grow during pregnancy the frequency of crying amongst women increases further.

Researchers suggest that the beneficial effect of induced weeping is a useful therapy, particularly for people who have difficulty in sharing their emotions.

They found that the overwhelming majority of participants reported mood improvement after bawling, leading them to conclude that there are benefits to therapeutic intervention.

But beware – emotional tears contain different compounds than the extra fluid released when an eye is irritated, or invaded by a foreign body, or even if tears are simply triggered by peeling onions.

Sadly, there was no indication of the methods recommended in ‘recovery theory’ to induce emotional tears.

Apparently, subjects have been tested in post-therapy sessions, and researchers found that crying lowers blood pressure, that tears remove toxins that may have built up during anxious stress, and that weeping reduces manganese levels – the mineral that affects mood is found in thirty times greater concentrate in your tears than in your blood.

But when you try to unearth the secret of training yourself to well-up after a stressful event, and help get your body back into equilibrium – all you discover is that 40% of people weep alone, 40% of weeping takes place in the evenings, 77% takes place at home, 20% of crying bouts last longer than thirty minutes, and that women cry on average 47 times a year, compared to 7 crying episodes for men.

But tearful males are becoming increasingly acceptable in society. A moist eye, even a tear, in the right circumstances are now viewed more kindly.

No longer the province of sensitive, weak men, you may still be respected as a strong, powerful alpha male if you cry out of sadness, rather than anger – but a damp eye is more appreciated than handkerchief-soaking sobbing.

The Tear Catcher photographed here is a bottle device first used in Ancient Persia; after a sultan returned from battle, he checked



A Frenchman weeps as German soldiers march into Paris in 1940.

the levels inside his various tear catchers to see which of the wives in his harem had wept most in his absence; perhaps it never occurred to him that the wife who had missed him the most may have added a little water into the tear catcher, to emphasise the intensity of her sorrow.

In Ancient Rome mourners filled glass bottles with their tears, and placed them by the tombs of the dead as a symbol of their respect, remorse and love.

The more tears collected in tear catchers, the more highly regarded would be the deceased.

I have already ordered several large barrels, and am confident my family and friends will fill them with their dripping sobs, up to the brim, on my departure.

Note: If you are concerned that not enough people are going to show up at your funeral, I can help.

You could contact Rent a Mourner Ltd. and for an advance payment of £45 an hour per head, they can offer up to twenty mourners to grieve at your ceremony.

“Our staff will meet the client beforehand, and agree on their role, so that they will have known the deceased either professionally, or socially” a spokesman explains.

Each will be briefed on your background, your achievements, your disappointments, so that they can converse with other mourners in confidence.

The organisation provided many of their team at over fifty funerals in the company’s first year.

The founder was apparently inspired by the Asian and Middle Eastern tradition of supplying wailers at funerals, bereft women supposedly crying tears of anguish at your passing.

However, Rent a Mourner insist that their skill is to provide a moving and dignified farewell for you.

But book early. The company have turned down sixty requests to date; they are not prepared to travel too far to service your service.



RASPUTIN, STAR of tsar Nicholas' court, had MANY ATTRIBUTES.

Grigori Rasputin, remembered as the 'Mad Monk', the most powerful man in Russia, who brought about the of fall of their last Emperor and the Romanov dynasty, had his exceptionally large penis removed after his death and stored in formaldehyde, for inspection.

His daughter Marie described it as 13 inches long, an unusual claim for your offspring to be making; she had moved to America, worked as a dancer and tiger tamer in a circus, and may have been influenced by writing her reverential memoirs of her father as a saintly man, with any negative reputation he may have had being based on smears and slanders by his enemies.

In 1908, Rasputin was introduced to Russian Tsar Nicholas II and his wife. They had heard that he was a renowned mystic and faith healer, and Alexandra and the Tsar were seeking any available help for their sickly son, who they feared was close to death.

"God has seen your tears and heard your prayer. Fear not, the child will not die," reassured Rasputin.

The boy fortunately recovered from his haemophilia, and from the moment he was better, Alexandra gave Rasputin her passionate support.



Tsar Nicholas and his family in 1914.

This was a mixed blessing for the Imperial family.

Influential politicians and journalists used the association with Rasputin to denounce the Imperial credibility; they deeply resented having this fraud of a man claiming to be an official adviser to the Tsarina.

His enemies planted rumours of his lascivious behaviour, and contempt grew amongst state officials.

When Russia became embroiled in World War I, Nicholas II took command of the Russian Army, and Alexandra took control of domestic issues.

Though she continued to defend Rasputin to his powerful critics, a group of conspirators had had enough; he was invited to the palace for a grand meal with the Tsar's Grand Duke's cousin, and Prince Felix.

Rasputin was presented with food and wine laced with cyanide, but the poison apparently had no effect. Baffled, his enemies had to resort to beating him severely, then shot him to make sure he was sincerely dead, wrapped him in a carpet, and tossed him into the Neva River. His autopsy only revealed that there was water in his lungs, that this indicated that he had drowned, and that it must have been the result of an unfortunate accident that had caused him to slip into the icy waters.

Rasputin, who had grown from Siberian peasant to failed monk, spent years wandering Russia until his mystical healing powers bought him into the Imperial orbit.

His gift for prophecy did not fail him when he wrote to Nicholas, "If I am killed by common man, you and your family will rule Russia for centuries; if I am killed by one of your own stock, you and your family will be killed by the Russian people."

Fifteen year later, the Tsar, his wife and all their children were murdered by assassins during the Russian revolution.

Of course, Rasputin became celebrated once again when he was made the subject of a Boney M Euro disco hit in 1978.

He would have appreciated the lyrics:

There lived a certain man
in Russia long ago
He was big and strong,
in his eyes a flaming glow
Most people looked at him with
terror and with fear
But to Moscow chicks he was
such a lovely dear
He could preach the bible like
a preacher
Full of ecstacy and fire
But he also was the kind of teacher
Women would desire

Ra Ra Rasputin
Lover of the Russian queen
There was a cat that really was
gone
Ra Ra Rasputin
Russia's greatest love machine
It was a shame how he carried on



The VATICAN'S favourite Barbie.

Beautiful Bald Barbie was created for girls coping with hair loss due to cancer treatments, or alopecia.

It followed a Facebook campaign led by the mother of a child who underwent chemotherapy – and drew 150,000 supporters in three months.

Its most influential backer was the Vatican; the Holy See urged Mattel, manufacturers of Barbie, to distribute the Bald and Really Beautiful line in retail outlets worldwide, as part of the collectible range.

Mattel was applauded for distributing the doll free to children with hair loss in U.S. hospitals, but the Vatican wanted the company to market bald Barbie across the world, alongside the rest of the range "in order to make child sufferers feel less stigmatised, more normalised in society".

Barbie was originally launched in 1959 by American businesswoman Ruth Handler, before it was acquired by Mattel, for whom it became the most profitable toy product in history.

The first Barbie wore a zebra striped swimsuit, with a signature topknot ponytail, and available as a blonde, brunette, or redhead.

Around 350,000 dolls were sold in the first year of production.

Barbie's appearance has changed many times over the years, notably in 1971 when her eyes were adjusted to look directly forward rather than the demure sideways glance of the original model.

Mattel spent heavily on TV commercials, a strategy that has since been adopted by many other toy manufacturers.

The high levels of advertising being aimed at children became widely known as Pester Power.

It certainly helped Barbie achieve global dominance, selling billions of dolls in 150 countries, with a sale taking place somewhere in the world every three seconds.

Barbie has had over 50 nationalities as the brand expanded globally, with Black and Hispanic Barbies introduced in 1980.

She has had more than 80 careers including fashion model, Olympic athlete, rock star, astronaut and palaeontologist.

Army Barbie was introduced in 1992 as a medic sergeant enlisted in Desert Storm, though she has also served in the Navy, Air Force, and Marine Corps.

She has run for the White House as President Barbie, on a platform of creating more opportunities for girls, and supporting animal rights.



A radical new style of playmate, a teenage fashion doll. Barbie started with an accentuated hourglass figure, and very long legs, but her bosoms were reduced after early complaints from parents. She may look very feminine, but she has been involved in vicious catfights with other dolls who have tried to encroach on her turf, like Bratz, a more raunchy competitor, and Sindy.

Barbie has had over 43 pets including, 21 dogs, 12 horses, 3 ponies, 6 cats, a parrot, a chimpanzee, a panda, a lion cub, a giraffe and a zebra.

The best selling Barbie doll of all was Totally Hair Barbie, with hair reaching from her head to her toes. Also popular was the 2000 Barbie, when she was given a belly button for the first time.

In 1975, Growing up Skipper was introduced as Barbie's younger sister, who could go through puberty by rotating her left arm; her breasts would get larger, she would grow a little taller and her waist would shrink. The Skipper line of dolls was discontinued after a year or two.

Over a billion fashion and shoe accessory variants have been produced since 1959 for Barbie and her companions.

Not merely a popular toy, Barbie is a cultural icon, a brand that provides cosmetics and apparel for her and her many friends; in the 1960's Random House published a series of best selling novels about Barbie's adventures, and in 2009, to celebrate Barbie's 50th anniversary, she had her own runway show at New York's Fashion Week.

It showcased creations by well known couturiers like Diane von Furstenberg, Calvin Klein, Vera Wang and Christian Louboutin.

In Taiwan, the first Barbie themed restaurant open in 2013, the Barbie Café.

In December 2005 the University of Bath published a research study to show that girls pass through a stage in adolescence when they grow to hate their Barbie dolls, and subject them to a range of punishments, including decapitation, amputation, or simply placing their doll in a microwave oven.

Have no fear – this is not the deep-seated psychological trauma of a psychopath in the making; the report assures us that disavowing Barbie is a rite of passage, and a rejection of being a mere child.

But if only they could have looked after their Barbie doll a little more carefully.

In September 2006, a Barbie set a world record in auction of £9,000 at Christie's, London.

It was Barbie in Midnight Red from 1965, part of a now very valuable collection of 4,500 Barbies owned by a Dutch mother and her daughter.



Barbie's wheel-chair bound friend Becky was introduced by Mattel in 1996, but was withdrawn as she couldn't fit into the elevator of the Barbie Dream House.



The MOON in a ROOM.

The Moon was exhibited at the Field Museum in Chicago in 1898, to record-breaking crowds. It was created in Germany, and transported to Chicago in 116 sections of plaster on a framework of wood and metal.

Based on the most accurate studies of the moon surface that Johann Schmidt, its constructor, was able to determine, when it was first revealed in the museum's Geology rooms queues formed all day to admire the display, described at the time as 'one of the wonders of the age'.

Of course, large numbers of people are firmly convinced that man has never set foot on the moon.

This belief isn't limited to crackpot conspiracy theorists, who may have watched too many episodes of *Twilight Zone*; you will be mystified to learn that one in four Britons believe that the Apollo Mission 1969 moon landing was a hoax.

A survey publishing this research, produced by the Institute of Science and Technology, noted with disappointment that the public's belief in the legitimacy of science and technology seems to have declined over time.

Even a vocal minority of Americans believe that the images of Neil Armstrong standing on the lunar surface were actually a smoke and mirrors illusion, staged to enhance national pride during the space race with Russia during the years of the Cold War.



Conspiracy theorists claim that Stanley Kubrick, director of *2001: A Space Odyssey*, was secretly approached by NASA to film the fake moon landing to be broadcast as 'live from the moon'.

Here are some of the flaws in the elaborate hoax that they believe they have penetrated:

1. The American flag was waving, in what was supposed to be the vacuum of space.
2. There are anomalies on both film and photography of the landing, with mismatched light and shadow.
3. There was a lack of dust kicked up by the lunar module when it touched down.
4. There are no stars visible on any of the footage.
5. If you look carefully in the reflection of Buzz Aldrin's visor, you can see Neil Armstrong apparently taking the photo – but he isn't holding a camera, so how could he have taken the picture?
6. Photographic manipulation is evident where the astronaut's shadows appear to be seen moving in different directions; other images have clearly been tampered with because crosshairs seen on moon photography somehow appear *behind* parts of the picture.

Every one of these elements offering graphic proof of fakery has been carefully explained by NASA. And more entertainingly, by an organisation called Mythbusters, who demonstrated, for example, how a flag could wave in a vacuum.

But more basic reasoning shows that the extent of the fraud would be more complex than actually landing a spacecraft on the moon.

Tens of thousands of people worked on the Apollo mission at NASA, alongside a variety of contractors, as did individuals working peripherally on the projects, e.g. relay stations in Australia and Spain. Transmission from the moon's surface was picked up by the Soviet Union, the nation that had most possible interest in exposing a U.S. hoax.

Of course, conspiracy believers contend that the Soviets were secretly bribed with large grain shipments.

However, there are manifold reasons why people would want to come forward at any time in the last 44 years, and conclusively prove that the landings were faked; political gain, monetary gain, global fame.

In reality, disproving man's first steps on the moon would be an impossible temptation to resist for one of the many thousands involved.

Let veteran astronomer Sir Patrick Moore have the last word about those who believe the moon landing was a hoax.

"If ignorance is bliss, they must be very happy."

Note: Claims that the moon landing was a fraudulent concoction have been debunked numerous times by the world's leading scientists – but this did not stop Channel 5 airing a documentary of sorts in December 2012 called *Did We Land On The Moon?*

The scientific community were outraged that the programme portrayed conspiracy theorists as having legitimate concerns, posing many arguments that remained unanswered.

It included no dissenting views from any qualified expert, giving undeserved credibility to views that have many been demonstrated to be basic scientific blunders many, many times over.

And yet, in the name of balance, even now our fake-moon-landing theorists get another round of publicity...

The Russian TRAMPOLINE that HELPS commuters BOUNCE happily to WORK.

In 2012, this trampoline was installed in Nikola-Lenivets, and quickly became so popular, plans were immediately drawn up to expand the scheme for commuters to travel into and across busy cities.

As early as 1871, inventor Alfred Speer patented his ‘moving sidewalk’ that he believed would revolutionise pedestrian travel in New York.

His system was based on three belts running parallel to each other, each moving a little faster than its neighbour.

You could step on the first one moving at just 3mph quite easily, making it safe to then move onto the next one, moving at 6mph, and the next one at 9mph.

You could increase or diminish your rate of transit at will.

Speer even planned to place seating at convenient points on the travelling platforms, for your added comfort.

The 1893 Exposition in Chicago introduced 4500 feet of movable sidewalk primarily aimed at ferrying passengers arriving by steamboat. They would disembark, and be carried down the pier, delivered to the shore and directly to the Exposition entrance.

By 1900, the Paris Exposition created its own impressively large mobile walkway, enthusiastically described in the *New York Observer*: “It is possible to proceed to a distant exhibition by travelling sidewalk, and thousands avail themselves of this means of transportation.

"The circuit of the exposition can be made with rapidity and ease by this contrivance.

It also affords a good deal of fun, for most of the visitors are unfamiliar with this mode of transport, and are awkward in its use".

The travelling pavement came into vogue again in the 1920s, when the city of the future was predicted as glossily sleek and automated.

But then the world became preoccupied with the Great Depression, and World War II.

In the 1950s, Goodyear drew up different schemes to adapt the walkways for a radically re-imagined New York subway system.

Publicity suggested "Why not conveyor belts, huge moving sidewalks to zip pedestrians along from place to place?

These 'speedwalks' are not supersonic, but steadily moving (in contrast to cars, buses and taxi cabs mired in traffic jams) and are just the device to come to our rescue".



Paris Exposition 1900, with elegant visitors enjoying the moving walkways.

Today, Goodyear simply make the human conveyor belts seen at Disneyland, rather than the mass transit systems that they had hoped.

Even now, pedestrian walkways are mainly to be found only in airports, though in 2002 an experimental high-speed version was installed in the Paris metro.

Its speed was eventually reduced due to a number of accidents when people lost their balance, and was finally discontinued, as it also proved to be technically unreliable – as well as causing too many broken bones.

In science fiction books and films, moving walkways are a commonplace feature of everyday life.

The 1927 film *Metropolis* depicted several scenes with sidewalks and escalators ferrying passengers between skyscrapers at levels 70 storeys high.

Arthur C. Clarke's futuristic novels featured solid floors that can mysteriously move as though they were fluid, at 100mph, and curving around corners.

These were soon to be eclipsed by the sci-fi advent of tele-portation, to instantly transport you anywhere across the world.

But would that keep you as fit as trampolining your way to work each morning?

Note: Plans are underway in Paris to erect a trampoline bridge across the Seine.

Architects were invited to create an iconic new structure for the capital; as there are already 37 bridges crossing the river, the design had to be powerful enough to become a landmark.

The forerunner is a structure comprising of three giant and buoyant PVC donuts, each thirty metres in diameter and linked on the top surface by a sturdy trampoline.

It will curve up like a traditional bridge, and the designers claim that "this joyful release from gravity" will encourage locals to enjoy their commute, taking in the view as they bounce across the river.



The BROOKLYN BRIDGE in 1914, and the MEN who PAINT the CABLES.

The construction of the Brooklyn Bridge was a remarkable feat of engineering, made possible as with most of history's great achievements, by the relentless efforts of the people who created it.

The photograph shows the dexterity and bravery of some of the men tasked with re-painting the cables of the bridge in 1914, freshening it up decades after its completion.

Their casual poses bely the dangers of a job which necessitated them being suspended on swings to apply the paint, in gusty winds and at heights of up to eighty-three metres.

Most of the painters, known as 'sandhogs', were newly arrived immigrants, paid $2 a day for risking their lives.

Building the bridge was also a perilous activity for its original designer, John Augustus Roebling, himself a German émigré.

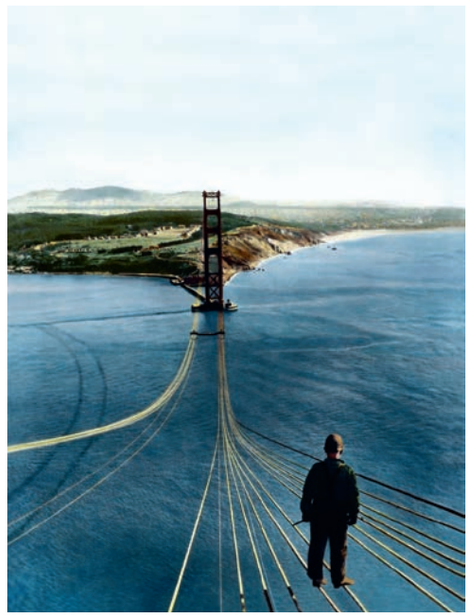
His work as a civil engineer on suspension bridges across America, including the one at Niagara Falls, and his development of the 'web truss', which made the extreme elongation of the bridge technically feasible, earned him the contract for the project.

Spanning 16,000ft, it was to be the longest in the world.

Cruelly, on taking some final compass readings, his toes were crushed between a boat and mooring.

Three weeks later he died of tetanus, and left his son, Washington, to take over as Chief Engineer.

Washington himself was to be another victim of the bridge project.



Golden Gate Bridge painters at work high above the city, on December 3, 1915.

He was left paralyzed by the 'bends', and had to watch the construction from afar, whilst his wife took over the project – a rather revolutionary move at the time given women were not even allowed to vote yet.

The 'bends' was then known as caissons disease, after the caisson structures that allowed workers to work at the bottom of the river, up to 78 feet below the surface.

These metal tunnels would be sunk and drained of water, the bottom of which could be reached via small pressurized iron containers.

Journeys in these would entail a rapid descent, causing dangerously high levels of gas to be absorbed into the workers' blood streams; this was compounded by ascending, which would cause the oxygen bubbles to quickly dissipate.

As a result 'sandpigs' would typically suffer from bleeding noses, joint pain, paralysis, convulsions, and sometimes death.

Alongside were those who died from the traditional forms of construction peril – falling materials, fires and collapses.

The bridge was finally completed in 1883, and has long stood as a wonder of 19th century engineering.

On its inauguration 250,000 crossed from Manhattan to Brooklyn and back.

But six days after it opened tragedy struck; rumours spread that the bridge was about to collapse and in the resulting stampede twelve people were fatally crushed.

Over a century later the bridge was once again in the headlines when a truck driver, Luman Faris, was convicted of supplying information to Al-Qaeda; he aimed to facilitate the destruction of the bridge by cutting through its support wires with blowtorches.

The National Security Agency uncovered the plot, and Faris was sentenced to 20 years in prison.

Where Al-Qaeda failed, Hollywood has succeeded; the bridge has been violently destroyed in many movies including *Godzilla* (the very poor 1998 remake), *Cloverfield* (2008) and perhaps most spectacularly, in a scene that cost $5 million to shoot, *I am Legend* (2007).

Bridges often form the centerpiece to a city's attractions, and can be a profitable infrastructure to own.

The legendary George Parker played on both these facts during his long and illustrious career as a con artist.

He made his notorious living by selling New York's landmarks to gullible tourists, and the Brooklyn Bridge was his favourite of many fraudulent sales.

Using charm and counterfeited papers, he would convince unsuspecting visitors that the bridge was for sale, and that whoever owned it would stand to make many thousands of dollars by charging the public to cross over.

He was so successful that the police had to actively intervene a number of times when buyers would attempt to build toll booths to collect their money.

Parker was finally convicted of fraud and ended up in Sing Sing prison, where he proved a popular inmate with both guards and his fellow prisoners, entertaining them with his experiences of selling the Bridge, Madison Square Garden, The Metropolitan Museum of Art, and the Statue of Liberty.



He MISSED his passage on the *Titanic*, but SANK with the *Lusitania* three years LATER.

Alfred Gwynne Vanderbilt graduated from Yale University in 1899, and decided to leave for a world tour with a party of friends.

The trip was to have lasted two years, but when he reached Japan, he received news of his father's sudden death, and rushed home to find himself one of the richest men in the world, the head of the Vanderbilt family.

His elder brother had died in 1892, and his brother Cornelius III had been disinherited by their father.

He stood at the helm of a railroad empire, a steamship line, and the Plaza Bank.

Alfred was a shrewd judge of real estate, and increased the family wealth by investing in hotels and properties across New York.

He was known as a celebrity sportsman who excelled at fox hunting, and would travel to the UK to seek out the purchase of the finest foxhounds, and horses.

In 1912 he made a last minute decision not to travel back to the U.S. on the RMS *Titanic*. He was so late in cancelling his trip, he was still listed in newspaper accounts as having perished when the boat sank.

On May 1 1915 he boarded the RMS *Lusitania* in New York, bound for Liverpool. It was a business trip, so leaving his family at home, he only travelled with his valet.

It took until May 7 to reach the coast of Ireland when the ship was torpedoed by a German U-boat, causing an explosion that sank the enormous *Lusitania* in under 18 minutes.

Reports of Vanderbilt's bravery were confirmed by a number of survivors.

Helping others onto the lifeboats, he came across a young mother with her small baby; he promised he would locate an extra lifejacket for her, but failing to find one, gave up his own and tied it around her as she held her infant.

Probably braver than you or I would have been, as he must have realised that there were no more lifeboats available, and knowing also that he was unable to swim, Vanderbilt was subsequently one of the 1198 who died in the sinking.

You will find a memorial erected on the A24 road just south of Dorking – "a gallant gentleman and a fine sportsman, this stone is erected on his favourite highway for coaching trips".

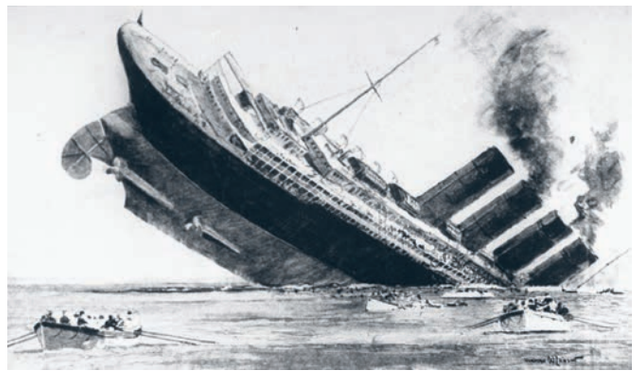
Though many highly renowned billionaires died on the *Titanic*, including an Astor and a Guggenheim, alongside the owner of Macy's legendary department store, there was also an illustrious group of fortunates who missed the *Titanic*'s maiden voyage.

Theodore Dreiser, the admired novelist, was talked out of returning from his first visit to Europe on the *Titanic* by his English publisher, who persuaded him that the trip was too expensive and he could get a better deal on another ship.



Launch of the *Lusitania*, 95ft shorter than the *Titanic*.

Guglielmo Marconi, the revered Italian inventor who won the Nobel Prize for Physics in 1909, was offered free passage on the *Titanic*, but took the *Lusitania* three days earlier because they provided him a public stenographer on board, which would enable him to continue his work.



The *Lusitania* after it had been struck by a German U-boat torpedo.

Marconi was also on the *Lusitania* three years later, when it was sunk by a German torpedo, but survived.

If you have ever enjoyed a bar of Hershey's chocolate, you will be pleased that although Milton Hershey had paid his deposit cheque for the *Titanic* trip, he left on an earlier boat for business reasons.

The 'Napoleon of Wall Street', grand financier J.P. Morgan who created General Electric and U.S. Steel also controlled the White Star Line, owners of the *Titanic*.

He had a personal suite on board with his own private promenade deck, and a bath equipped with custom designed cigar holders.

He was booked on the maiden voyage, but instead remained at the French resort of Aix to enjoy his morning massages and sulphur baths.

Henry Frick, whose spectacular art collection and museum are one of the jewels of Manhattan, cancelled his passage when his wife sprained her ankle in Italy.

More bad news followed for the White Star Line; the return trip for the *Titanic* had been solidly pre-booked, and the would-be passengers all had to be fully refunded.



The type of PHOTO-OP we miss FUMBLING for a CAMERA.

Is it Pegasus come to life?

No, it's simply a fortunate cameraman's snap of a bird and deer in perfect alignment. With the growth in digital photography, the tidal wave of images that inundate us daily has increased with alarming velocity.

The internet is flooded with images such as this one, often taken by happy accident via the lenses that are being perpetually focused around the the world, capturing and sharing everything.

Invented in the first decades of the nineteenth century, photography was not initially as rapid-fire a technology as it is today.

Nicéphore Niépce is credited with the first photographic process and his images took eight hours to expose.

Louis Dauguerre, Niépce's student, picked up the mantel and managed to concoct a mixture of silver and chalk that reduced exposure times to several minutes. The ease with which we now create photographs has fostered a remarkable image-based culture.

Photo hosting website Flickr alone sees 43 million pictures uploaded a month, 1.42 million a day on average.

Facebook receives an incredible 300 million photo uploads a day, and YouTube receives 72 hours of footage every minute.

The age of the internet has favoured the image far above the word, and provokes anxieties that we are losing something in these paradigm shifts.

How will they affect the human mind, memory and perception?

Photography, at first consideration, is the art of truth, recording reality honestly and directly, and preserving it for posterity. However from its first inception the photograph has been used to misdirect the viewer, and to tamper with the narrative of history building that the medium had become intimately connected to.

War photography requires a cameraman to suspend a natural response to death, decay and destruction in order to capture the most telling shot.

The reliability of such images is hardly debated given the horror of the subject matter. Surely no one would wish to falsify a war scene?

Alexander Gardner and his assistants operated as photographers during the American Civil War. His most famous series followed the Battle of Gettysburg, a body of work with lasting influence on the world's perception of that conflict.

But as late as 1961, an art director at the Civil War Times noticed that two of the images showed the same corpse in different locations.

This startling discovery pointed to the fact that Gardner had moved corpses on the battlefield into more dramatic poses, and added props such as sharpshooter rifles, in order to give his photographs more of a punch.

Political leaders have long used photographic manipulations to re-write history, blotting out individuals who have fallen badly out of favour.

Stalin, Mao, and Hitler all used these techniques to eradicate colleagues who had failed in their duties such as Goebbels and Trotsky.



Faked images are also used as a form of propaganda.

In February 2013 Iran released an image of their stealth fighter stalking the skies over a snowy mountainous terrain. Released to inspire alarm in the minds of Iran's enemies, the plan backfired when bloggers revealed that the shot had been taken of a small grounded jet and the mountains superimposed beneath.

Critics of the Iranian-built plane had regularly pointed out its basic inability to fly, due to its scale problems and use of plastics. Iran was previously caught using Photoshop techniques when authorities digitally added a fourth missile to a 2008 official photograph of a missile test.

Photoshop manipulation, besides creating the plethora of hoax images that circulate bored office workers inboxes, is widespread

in enhancing images of celebrities and models across magazines, newspapers, and billboard advertising.

The problem has become so acute that in 2011 the American Medical Association announced a stand against the beatifying of images as contributing to unrealistic body expectations and eating disorders.

This ruling went some way towards French politician Valerie Boyer's recommendation that all published images that have been digitally altered should be accompanied with a warning label.

A well-known movie star was openly outraged by *GQ* magazine's radical distortions of her body on its front page in 2003. A champion of the fuller figured woman she deplored the decision to alter the picture, making her seem 6 foot tall with very long, very skinny legs.

Scientists are currently seeking to explore the damage that faked images create in the human psyche. For example, images such as the apocalyptic clouds over New York during Hurricane Sandy are now widely known to be artificial. However our brains processed them as real, and they are stored in our memories as such.

Similarly, in an experiment analyst Elizabeth Loftus' subjects were shown images from their childhood. In these a falsified photograph of them as a child in a hot air balloon was inserted.

Half of those shown the fake image would then later recall this balloon ride as if it were a real memory, despite it being entirely fabricated.

The great benefit of the endless clicking of cameras, now handily available on every phone, is that few photo-ops go unrecorded. While you're fumbling for a camera, someone near you will already be admiring the remarkable picture you missed.



A HELICOPTER takes a RHINO for its first FLIGHT.

The holocaust of the Rhinoceros population, slaughtered to the point of near extinction for their horns, continues largely unabated – simply to meet an insatiable demand from the Far East.

Rhino horn is considered a highly effective aphrodisiac in China and Vietnam, based on its mythical medicinal properties, though of course it's about as effective as chewing your own fingernails.

Furthermore, newly-wealthy Asians like to display a grand rhino horn in their homes, as an indication of their power and status.

Horn is also traded in powder form as a remedy for many ailments, from hangovers, arthritis, to cancer.

The rhino being hoisted inelegantly by its legs beneath the helicopter was on a 1,000 mile trip to rescue it from poachers, while it quietly slumbered.

It's considered quick and safe to pluck rhinos and transport them sedated in this way.

The World Wildlife Fund and South Africa's leading veterinarians find the new procedure is gentler on the giant beasts than being transported on a long lorry trip over difficult tracks.

It shortens the time their passenger is kept asleep, and respiration is not compromised as it would be in a net.

Rhinos are taken to safer parts of the continent, where poaching can be more carefully policed.

The situation is so grave in parts of Africa, game park wardens cut the horns from each rhinoceros to save the animals from being killed by callous traders.

Poachers even poison water holes to snare tusks from rhinos, caring not a jot about the lions, buffalo, and other animals they murder and leave to rot.

Legitimate big game hunters are still entitled to kill in Africa, but with strict quotas on the number of animals they may shoot.

The system opened up a grisly new loophole for a Thai entrepreneur, who evaded the hunting quota by importing dozens of Thai sex workers as fake hunters, posing them with their supposed kills, though very few may have ever fired a weapon.

The charming head of the organisation was paying $10,000 per kilo (2.2lbs) of rhino horn, and selling them back at home on the black market for $55,000.

He found his enterprise as profitable as heroin trafficking, without having to deal with gangland mobsters.

A more fortunate rhinoceros was Cacareco.

In 1959 the city council election in Sao Paulo had a surprise winner: a five year old female rhino at the local zoo.



Councillor Cacareco.

Cacareco won by a landslide in fact, gathering 100,000 supporters – one of the highest votes of confidence for any local candidate in Brazilian history.

The candidacy was traced back to a group of students making a political gesture, one that dramatically succeeded beyond their wildest hopes.

They printed up 200,000 ballots with Cacareco's name on them. The ballots were then legiti-mately cast by voters, one of whom commented, "Better to elect a rhino than an ass".

It caused nervous uproar amongst officials who interpreted the act as a sign of revolt and anarchy, a protest against food shortages, the high cost of living, political corruption, general disgust.

The director of the zoo asked for the council to pay his Cacareco an appropriate salary.

However, the election was subsequently nullified, and a new vote conducted with no rhinoceros candidate.

The celebrated rhino died in 1962, but 'Vote Cacareco' has remained a widely-used term across South America to signify a protest vote.

Inspired by her legacy, the Rhinocerous Party was a registered political organisation in Canada between the 1960s and 1990s.

They claim to be the spiritual descendents of Cacareco, and named the rhinoceros in the local zoo as their leader – Cornelius III.

The Party ran against the then Prime Minister Pierre Trudeau in his home Montreal seat, with a promise "to keep none of our promises".

In the tradition of political satire they offered a wide-ranging variety of ludicrous schemes in their manifesto, to entertain the electorate.

They declared that a rhinoceros was a perfect symbol for their political party as politicians are by nature "thick-skinned, slow moving, dim witted, but able to run quickly when in danger".



An artist who STANDS BEHIND his work.

LITERALLY.

In ancient times Mediterranean pirate ships would be painted blue-grey for concealment, a technique perfected by Julius Caesar in the Gallic wars.

He sent reconnaissance boats to gather intelligence along the coast of Britain, coated in bluish-green wax, including the sails, ropes – even the crew.

It wasn't until the 19th century that military camouflage in land battles was introduced, driven by the improving accuracy and range of infantry firearms.

The British army made use of green uniforms for battle, while others often used more easily spotted red tunics. British troops started to adopt khaki uniforms, a more suitable palette for the Indian Mutiny of 1857, and then later during the Boer Wars.

During the First World War, the French Army took disguise to a new artistic level.

They formed a corps of artists, called camoufleurs, to create colour schemes to hide gun emplacements and observation posts.

Camouflet was a French term meaning 'to blow smoke in someone's face', a term plundered for the new military tactic of camouflage.

The technique grew so sophisticated that by World War II aircrafts could be painted two different colours, making them harder to spot.

They presented sky colours when being seen from below, and ground colours when seen from above.

Bombers were often painted black, as they regularly flew at night.

Maritime reconnaissance planes were coloured white to avoid appearing as dark shapes in the sky.

After the Second World War, radar made camouflage less effective, though combat clothing was developing to match different types of terrain such as woodland, snow and desert.

Man has never been able to challenge the specialist skills found in the animal and insect world.

The masters of disguise are found across both kingdoms; I find the Horned Lizards of North America especially creative in having evolved elaborate measures to elimate shadow.

Their bodies are flattened, with sides thinning to the edge, and fringed to eliminate any shadowing under the edge of the body – essential to remain hidden in open desert.

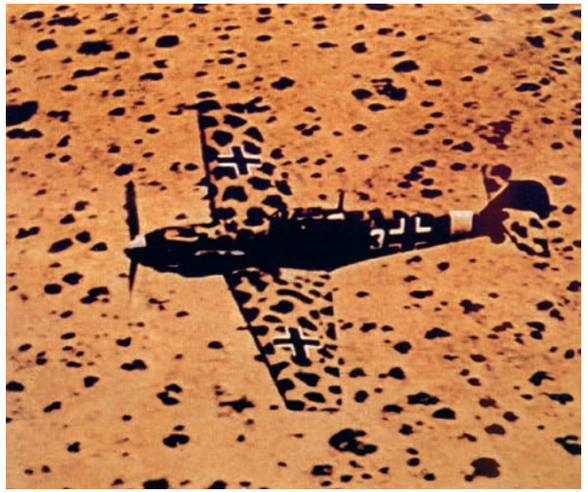


A Leaf Mantis doing its job of staying well hidden, disguised as just another leaf.

Young giraffes learn quickly that although they are all-to visible to hunting predators while standing, if they lie down and keep still, which they are prepared to do for hours, they are more easily missed by marauding tigers or lions.

Under the seas, the Decorator crab is very gifted at covering its back with seaweed, sponge and stones; it renders itself virtually undetectable.

Jellyfish are often almost transparent, and silver fish glide by as wisps of light.



A German plane camouflaged for Africa.

Today, camouflage is often used by considerate municipal organisations, using cosmetic techniques to avoid resistance from the community.

In South Africa cell telephone antennae towers are sometimes disguised as tall trees, with luxuriant plastic branches and leaves.

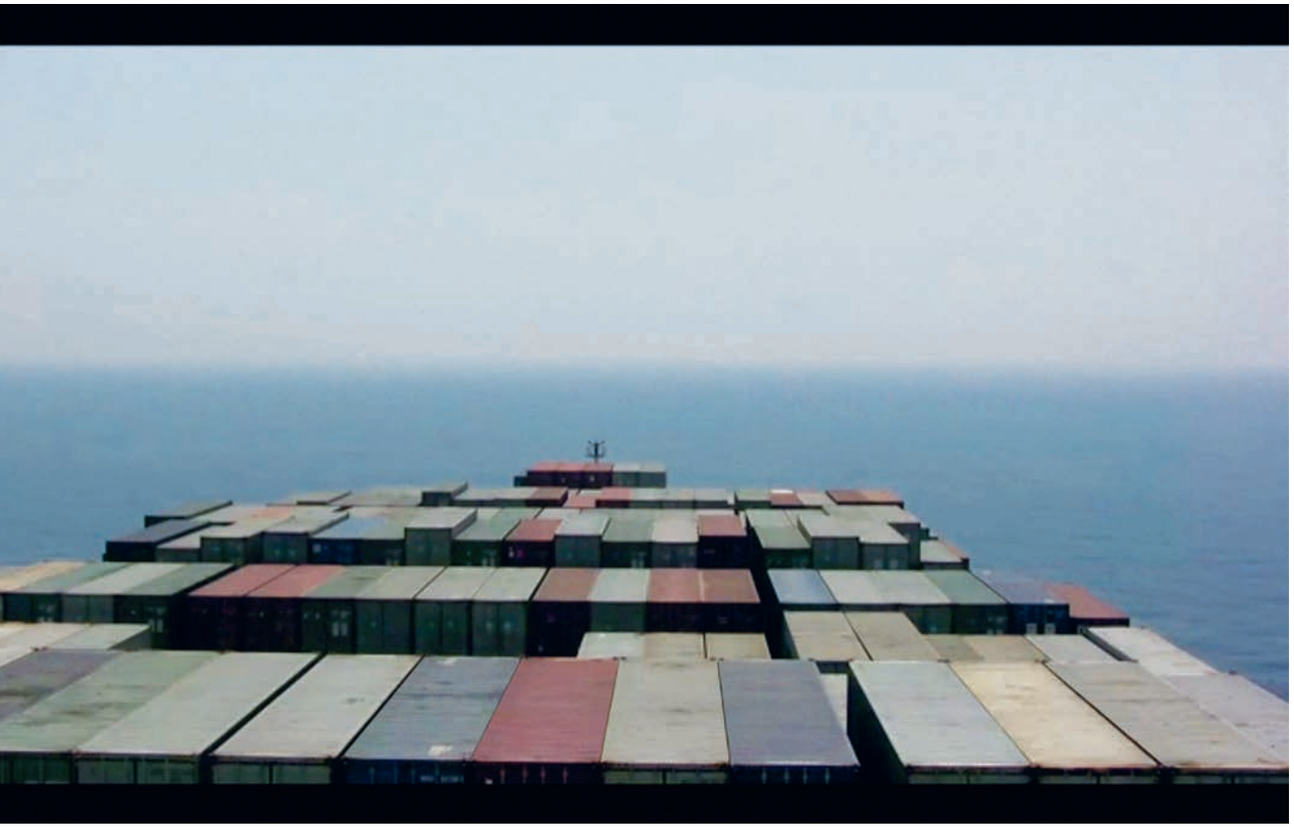
The local councils in London have yet to try to prettify our lampposts or electrical poles, or use fake flowers to decorate our streets, thankfully.

Note: Frédéric Lebain's work method begins by photographing a particular location and creating a very large format print to a matching scale.

He then returns and takes another photograph, placed in front of the exact spot, allowing the images to merge into one another.

Lebain was originally a chef, then a culinary stylist for magazine shoots, learning his craft from the masters of still life.

He then switched over to the other side of the lens to become a much respected photographic artist.



Logistics, the LONGEST film ever shown, at 857 hours.

This is one of the more gripping stills from *Logistics*, tracing the passage in exquisite detail of a crate being sent from a factory in Stockholm, Sweden to another factory in Boa'an, China.

Whilst *Logistics* may not rival *The Bourne Ultimatum* for pace, *Citizen Kane* for groundbreaking cinematography or *Gone with the Wind* for romance and spectacle, it does impress upon viewers, even if you tune in to the filmmakers' website for just a few minutes, the monolithic nature and sheer physicality of getting products from factory to market.

We are so distanced from the process, for many of us contemporary life can now appear to be constructed around instantaneous purchases of plentiful goods made readily available on the internet.

In reality materialism is far more material.

The world is ringed with shipping lanes saturated with titanic freight ships ploughing their way from coast to coast.

The world's largest of these was recently launched, and forms the first in a long line of new transport vessels that will move everything from cars to camcorders across the world from producer to buyer.

The aptly named *Marco Polo* is a hulking behemoth; at 396 meters long it is the equivalent of four football pitches, can carry 16,000 containers, and is far bigger than any passenger superliner ever built.



Andy Warhol's *Empire* stared at the building for 8 hours.

The *Marco Polo* is the largest manmade object to have ever moved across the planet – and appropriately this gargantuan of subjects was selected to be the protagonist in the longest of films.

What most of world's longest films have in common is that they are art films in the true sense – they were made for display in a gallery or exhibition context rather than in a cinema on general release.

In 1964 Andy Warhol made *Empire*, eight hours and five minutes of silent black and white, slow motion footage of the Empire State Building, from a direct, fixed view-point.

Abridged showings were never allowed, and supposedly the very unwatchability of the film was an important part of its creation.

A year earlier, Warhol had exhibited *Sleep*, again a black and white silent movie shot from one single perspective of a man sleeping, for five hours and twenty one minutes.

I am sure it was more entertaining that Adam Sandler's wearily unfunny *50 First Dates*.

Christian Marclay's wonderful *The Clock* (2010) comprises of thousands of cuts from movies of all kinds, each containing a visual reference to every minute of 24 hours, and each acting as an internal timekeeper for the film.

Similar in its appropriation of existing footage is Douglas Gordon's *24 Hour Psycho* (1993) in which the artist slowed down Alfred Hitchcock's well-known thriller to two frames a second, making the film last a full 24 hours.

My favourite of the marathon movies created for theatrical release was Ingmar Bergman's 1982 epic *Fanny and Alexander*, in its full 312 minute version.

Set in the Swedish town of Uppsala in about 1907, it follows life in two households, the well-to-do family of the Ekdahls, and the ascetic home of the local Bishop.

It did win a number of Academy Awards, but don't let that put you off.

In 1980, director Rainer Werner Fassbinder had created *Berlin Alexanderplatz* which spanned 15.5 hours, charting the sexual and economic life of Berliners in the 1920s.

However remarkable it was, the film originally was broadcast as a miniseries for TV, and was only later screened in full at art house cinemas.

Clocking in at an impressive 3 hours and 12 minutes is the 1963 epic *Cleopatra*. Starring the cream of acting talent of the day, headed by Elizabeth Taylor and Richard Burton, the film cost $44 million (equivalent to $323 million today) to make, and in real terms remains the most expensive film ever. It nearly bankrupted 20th Century Fox after its lacklustre box office returns.

Filming began in London, but because Elizabeth Taylor fell ill, production moved to Rome where she felt she could recover in better weather.

The sets left in Britain were put to good use for the slap and tickle comedy *Carry on Cleopatra*, a film far more revered by sophisticated moviegoers and enlightened film critics.



The Cure for Insomnia runs 87 hours long, and consists of L.D. Groban reading a 4080 page poem. It has never been released, doesn't count as a 'film' amongst aficionados, and was only played once at the school of the Art Institute of Chicago.

Ten cents to SEE a premature BABY.

Premature babies in incubators were a popular side show attraction at Coney Island Amusement Park from 1903 to 1946.

Over half a million people came to see them being cared for by nurses, paying ten cents to see the exhibit.

Mothers and fathers of premature babies were not charged; incubators were a new, unproven invention, and the parents were seen as pioneers, as well as being desperate to keep their child alive.

Dr Martin Couney, known as ‘The Incubator Doctor’, was a German who relocated to America having studied medicine in Paris under the great doctors of obstetrics.

One of his mentors was Étienne Tarnier, who was the first to realise that heat and hygiene might be the best solution for prematurely born babies; he had been inspired by studying chicken incubation.

Tarnier’s first contraption was rather crude, just a wooden coffin with a glass top and a couple of hot water bottles.

Following his tutor’s example, when Couney launched six of his revised incubators at the Berlin World Exposition in 1896, he named his exhibit ‘Kinderbrutanstalt’, or ‘Child Hatchery’.

The show was a hit, the children flourished, and he toured to London; when he moved on to American he enlisted wet nurses and a fully operational unit of specialists to further develop his ideas. Babies only breathed in fresh air, pumped straight into their tanks, which was first filtered and warmed, and were fed and cleaned every two hours.

Unfortunately Couney was forced to exhibit in the attractions or 'freak show' section of fairs, rather than among the serious scientific exhibits – his work was rejected by his peers as nothing but entertaining sensationalism. His display was referred to as the Art of Healing in promotional literature, making it seem natural that visitors would choose to line up and stare at babies as if they were sculptures.

After settling in America, Couney continued to do the rounds of countrywide fairs, whilst maintaining a base at Coney Island.

Every summer Couney employed barkers to stand outside the exhibit to persuade people to part with their cash, calling out to passing crowds much like a enthusiastic salesman on a market fruit-stall: 'Don't pass the babies by!' One of his regular barkers was Archibald Leach, a struggling British actor finding work in between auditioning for Broadway musicals. Leach made it in to showbusiness in the end, but deciding his name wasn't appealing enough for stardom, changed it to the more agreeable Cary Grant.

Coney Island's proximity to Manhattan meant that it attracted many entrepreneurs trying to make it big in the Big Apple.

Predating the Babies Display, the most recognisable Coney Island attraction between 1885–96 was the Elephantine Colossus. This giant elephant served as a hotel, concert hall, gallery, cigarette shop and amusement bazaar, and stood at 150 feet tall. Inside the elephant's eyes large telescopes were installed, offering gullible customers their chance to take in views as far away as Paris; in later years when it fell out of favour a brothel opened up inside the elephant's giant belly.

The Colossus' main cause of celebrity was that it was the first landmark recognisable by immigrants making the passage to America, visible even before the Statue of Liberty – an odd greeting for people arriving in the Promised Land. The immense elephant met an unhappy end: the brothel caught fire, prostitutes and customers fled, and with nobody bothering much to intervene, it burnt to the ground.

In 1904, a new fair opened on Coney Island called *Dreamland*; the vision of businessman William Reynolds, it was full of shows and rides illuminated by over one million electric light bulbs, and caused quite a stir. However, in 1911 *Dreamland* suffered a similar fate to the elephant. A fire broke out in an aptly named new exhibit *Hellgate* – a boat ride through the fiery gates of Hell.

Trying to fix a leak by caulking it with molten tar, operators set light to the attraction. Lightbulbs popped and fire streamed out of the giant winged beast who famously perched on the ride's roof.

Firemen couldn't arrive in time, so the Midget Fire Department from the neighbouring *Lilliputia* exhibit rushed to the rescue, and the six babies from the incubator building next door were all thankfully saved just in time by nurses.

Unfortunately, the efforts failed to save *Dreamland* which was largely destroyed; on its site now stands the New York Aquarium, the oldest in America. Couney's babies were incorporated into the next big amusement fair *Luna Park*, until it was closed in 1946.

During over 40 years of exhibiting, Couney saved some 8,000 babies – known as 'graduates' when they were rejoined with their parents – a record unmatched in medicine by any individual.

Included in the number was his own daughter Hildegarde, who spent the first three months of her life in her father's exhibit and went on to become one of his nurses.

However some concerns arose that it was in neither the parents' nor the children's best interests to be separated for so long, a notion that hadn't been considered earlier.

It was now believed to be detrimental to forming a strong familial bond, and some parents were reluctant to take back their babies when they 'graduated'.

It wasn't until after Couney's death in 1950 that Neonatal Intensive Care Units were established in hospitals.

In 1900 around 30% of babies died before reaching their 1st birthday: specialists have now been able to predict that by 2050 only 23 out of every 1,000 newborns will die in infancy.



The irresistible £160,000 GOLD shirt.

The streets of Pimpri in India may not be covered in gold, but at least Datta Phuge is.

Wealthy bachelor Phuge, who styles himself ‘Gold Man of Pimpri’, has gone further than others on the path to seek true love.

Seeking to entice discriminating ladies, he commissioned this magnificent 18 carat solid gold shirt, which took fifteen skilled jewellers two weeks of working double-shifts to complete.

Not fully satisfied, he added £85,000 matching gold and diamond cuffs, necklaces, and two fistfuls of elegant rings.

Mr Phuge explained “I know I am not the best looking man in the world but surely no woman could fail to be dazzled by this shirt?”

Dazzled indeed, the hearts of the world’s golddiggers clearly started racing; if he is as generous with his ladies as his is with his own attire, he’ll be beating them away with a stick, most likely a ruby encrusted, gold sceptre.

Except for a few fortunates for whom gold is in plentiful abundance, the world’s supply is relatively limited.

All the gold produced worldwide in a year would fit into the living room of the average home. It’s scarcity can best be grasped by noting that the world pours more steel in an hour than it has poured gold since the beginning of recorded time.

Rather charmingly, in Ancient Greece gold was considered a dense combination of water and sunlight. In Ancient Egypt it

was believed to be the skin and flesh of the sun god Ra, and available only to Pharaohs.

The largest stockpile of gold can be found five storeys below ground in the vault beneath the Federal Reserve Bank in New York.



Gold teeth are considered a symbol of wealth by Tajikistanis.

Holding 25% of the world's stock, 540,000 bars, it contains more gold than America's national gold safehouse, Fort Knox. However, much of the collection in the Federal Reserve belongs to foreign governments.

The country that produces the most gold is China, which makes 370,000 kilograms of it each year, closely followed by Australia and the U.S.; most of the gold China manufactures stays in their country to be made into jewellery and other decorative items.

Despite the relative scarcity of the gold produced, it is still used widely in the manufacture of many products; its natural ability as an electrical conductor makes it useful for much technological equipment, used in computers and mobile phones to transfer information quickly.

In dentistry, gold has been used since 700 BC and is still a popular metal for fillings and crowns because it is chemically inert, easy to work with, and non-allergenic.

Gold has recently had a renaissance in aesthetic appeal; since the 1980s hip hop musicians have indicated their success by wearing their wealth as golden, diamond encrusted dental 'grills'.

As you know, more grotesquely in World War II guards in German concentration camps would check the mouths of dead prisoners and excavate any gold they could find to melt down; teeth were dropped into buckets of acid to remove bone and flesh, and an estimated 9 kilos of gold were collected at Auschwitz each day in this way.

In Tajikistan gold teeth are seen as a symbol of wealth and beauty, particularly for women, and even in the poorest parts of the country people can be seen displaying rows of shining gold teeth. President Rahmonov was so infuriated on a visit to secondary schools in 2006 when he met many teachers modelling mouths full of gold, that he promptly passed a ban on gold teeth for all public servants.

The allure of gold has held the world perpetually fixated.

In the 1840s the California Gold Rush brought a feverish migration of speculators heading across America, after news of a massive gold mine found in Sutter's Mill in Coloma, California travelled around the country.

The pioneers packed their belongings and travelled by covered wagon across thousands of miles of hazardous terrain in the hope of finding great wealth, or at least a richer and more comfortable life.



Gold is also a useful insulator: in Toronto, the Royal Bank Plaza Towers have their 14,000 windows insulated with a thin layer of 24-carat gold, 70,875 grams in total, and valued at over a million dollars.

So many prospectors and their hopeful families died in the vast desert approaching Nevada, the area became known as 'Death Valley'.

Many perished through dehydration and hunger in what became one of the most graphic examples of chasing the American Dream.

The lust for gold has clearly been a consuming passion for many of us throughout history.

Clearly, they felt much like King Ferdinand of Spain, who in 1511 coined the deathless phrase "Get gold, humanely if possible – but at all hazards, get gold."



Private Greasley confronts Heinrich Himmler, head of the Nazi SS.

Horace Greasley inspected Deputy Führer Himmler, while Himmler inspected his PoW camp, Stalag XXI-D.

Himmler was en route to check on progress at the latest concentration death camps he was creating.

Private Greasley had secretly managed to escape from the prison 200 times, sneaking back in after meeting a local Silesian girl he had fallen in love with.

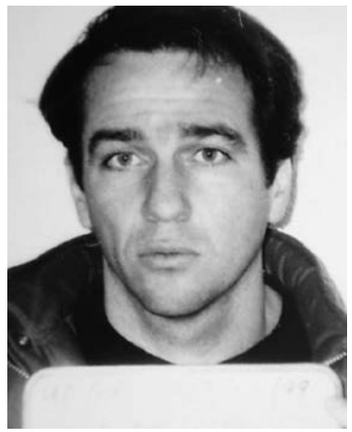
He returned to the camp each time because there was nowhere else to go.

Surrounded by German encampments,the prisoners were well-aware of the fate of all escapees who had attempted to flee.

Cinema audiences have been gripped by PoW films over the years; Japan's prison camps provided us with the epic *Bridge on the River Kwai*, and German prisons were the settings for *The Great Escape*, *Stalag 17*, *The Wooden Horse*, *The Colditz Story*, *King Rat*, *Von Ryan's Express*.

The French career criminal Pascal Paget made prison escape his specialised subject, and the use of helicopters his trademark methodology. On three separate occasions he masterminded schemes to have gang-members hijack a helicopter, land on the prison roof, and rescue him.

To rub salt in the police's wounds, after he was moved to the high-security Grasse prison he pulled-off his final helicopter



Pascal Paget: helicopter escape specialist.

release on Bastille Day, the French public holiday that celebrates the storming of the Bastille gaol.

More renowned for its level of security was Alcatraz Prison, located on an island off San Francisco, and legendary as a simply inescapable stronghold.

Harbouring America's most brutal criminals, it was a fortress of thick walls and iron, with twelve cell-checks per day; more relevantly, it was surrounded by the powerfully churning waters of the Pacific, utterly unswimmable for more than a few hundred yards, and miles away from the coast.

Frank Morris' long history of jail breaks prompted his final transfer to Alcatraz.

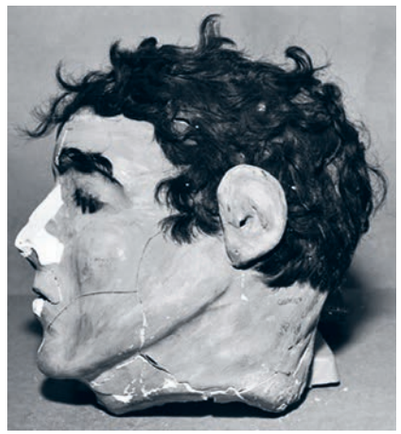
Morris discovered an unguarded utility corridor just behind the cells, housing a ventilation shaft.

He slowly assembled a makeshift drill, using pieces of a vacuum cleaner motor, and stolen pieces of tools he could turn into drill bits.

While he and his fellow inmates, the two Anglin Brothers, worked on loosening the air vents, they masked the noise of the drill by having a fellow prisoner nearby play his accordion as loudly as possible.

They created closely-spaced holes around the vent cover so that entire sections could be removed.

Once they had accessed the corridor, the rest of the plan fell into place. They had fabricated crude papier-mâché replicas of their own heads, with hair collected from the prison barber shop, and made dummy bodies which they left in their beds to fool wardens.



Frank Morris' cast of his own head left on his pillow.

Over fifty prison-issue raincoats were meticulously glued together to form a six-by-fourteen foot inflatable raft; Morris even modified the noisy accordion into a foot-pump to inflate the craft.

After two years of planning, with another inmate Allen West concentrating on making life-preservers and rowing paddles, they decided that on 11th June 1962 they would break free.

However, prisoner West had got so bogged-down with completing his tasks, he hadn't finished the holes in his cell's air vent.

He was left behind as the other three scaled 30ft of plumbing up to the roof, and then 50ft down a drainpipe to the waterside, where they had buried their makeshift craft.

Poor West admitted that they had planned to paddle their plastic-raincoat constructed little boat to nearby Angel Island, rest there and make any necessary repairs before waiting for the ideal tide to carry them to shore, where they would go their separate ways.

Today, Alcatraz is merely a tourist attraction, but when the fortress closed it was still recorded as the only prison that nobody had ever escaped from.

The authorities took the view that as no corpses of Morris and the Anglin's were ever found, they must have simply drowned and been carried out to sea.

Of course, for a more satisfyingly Hollywood finale, all three would have made it to the mainland, and spent the rest of their lives enjoying a glorious beach in Mexico, or the Caribbean, or anywhere very far away from San Francisco.



A black CAT audition in HOLLYWOOD.

Feline hopefuls line the streets for their big break in Roger Corman's *Tales of Terror* in 1961, a cinematic adaptation of three Edgar Allan Poe stories.

Whereas a budding cat star can never aim for the limelight, and must settle for supporting roles, or bit parts, their owners here have made every effort to ensure that their own pet stood out from the bunch – perfectly groomed with glamourous collars.

Despite getting more jobs in showbusiness than others, black cats have a poor reputation amongst their ginger and tabby counterparts.

Commonly associated with witches and evil spirits, black cats have routinely attracted superstition.

During the Middle Ages paranoid worries about black cats grew.

Because they were nocturnal, with sleek black fur, and gleaming yellow eyes, they were believed to have supernatural powers.

If a black cat was seen at the scene of a death or misfortune, they were considered somehow responsible.

Their case was not helped by the cats gravitating to lonely spinsters for companionship, who then found themselves suspected of witchcraft.

For many, crossing paths with a black cat after 9pm is still a worrying sign of impending bad luck; so much so that animal shelters are often inundated with black cats, outnumbering all others by far.



Peter Lorre and Vincent Price at the black cat audition for the Roger Corman film *Tales of Terror* (1962).

Shelters complain that they have difficulty finding homes for black cats, and some have learnt to put a ban on adoption around the end of October each year – they have found that people will take them purely to be used as victims of bizarrely cruel Halloween pagan rituals.

However, another superstition holds that a black cat walking toward you means that great fortune is heading your way.

One gentleman who firmly believed his cat had a hand (or a paw) in his riches was British tycoon Ben Rea.

When Rea died in 1988 he left his entire £13 million estate to his cat Blackie, cutting from his will his bemused and, no doubt disappointed, relatives and friends.

Blackie remains the richest cat in history; among him in the top ten wealthiest animals are Gigoo the Hen (£10m), Toby Rimes the Poodle (£30m), and Kalu the Chimpanzee (£53m).

Comfortably on top of the leader board is Gunther IV the Alsatian, who inherited an incredible £224m from his father Gunther III, who in turn had inherited his fortune from owner Karlotta Leibstein, a German countess.

Gunther IV was given sound financial advice, and tripled his inheritance through wise investments.



The world's richest animal Gunther IV.

He is high on the property ladder, owning a house that once belonged to Madonna, and has invested in a rare and expensive white truffle, which his advisors successfully bid for at auction.

Was it mere perversity that caused Rea to leave everything he had to Blackie, or could it have been something more sinister?

Cats are prolific carriers of the toxoplasmosis gondii parasite, a disease which they pick up from eating infected rodents.

It is believed that up to 60% of house cats have carried toxoplasmosis at some point, and 30–50% of people – not all of them cat owners.

Whilst toxoplasmosis is dangerous for people who are already frail, it can also establish itself in some otherwise healthy people, and create something akin to schizophrenia.

When an unfortunate woman is described as the ‘crazy cat lady’, it isn’t always a mere consequence of living in a home filled with cats.

Recent studies have shown that infection of toxoplasmosis through your pet cat can actually make you mentally unstable.

The clearest example of this effect can be found in rats.

Although t-gondii parasites can exist in any mammal, their goal habitat is the body of a cat, the only place where they can reproduce.

Rather cunningly, nature has ensured that when a rat is infected, eating rubbish containing traces of t-gondii for example, their life-long fear of cats vanishes.

In fact, going against every instinct, the rat is now very attracted to the smell of cats and seeks them out in a drugged state of infatuation, making them easy prey.

The cat happily snaps up the providential meal, and the t-gondii is happy.

In humans, the parasite causes similar, although far more diluted behaviour. Infected men and women go slightly against their instincts; some men become unusually introverted and suspicious of others, and women become overly vain, or too trusting.

Infected people also display a similar lack of fear of rats, caused by t-gondii affecting your dopamine levels – the neuro-transmitter linked to emotional response.

You are also more than twice as likely to be involved in a car accident, as the virus reduces reaction times.

Side effects may include an overbearing urge to keep a vast number of cats, and even, apparently, remembering them in your will.

If you happen to be dedicated cat lover, perhaps you would enjoy a shared activity with your pet? Head to www.catgalaxymedia.com,



Isis, station manager at Cat Galaxy.

an online radio station which has been feline approved.

Cat Galaxy Radio is based in Phoenix, Arizona, with the tagline ‘all cats, all the time!’ and has been successful for a decade.

Shows include: Morning Meows, Wednesday Night Cat Attack, Thursday Night Purr Party, and the Friday Night Feline Frenzy.

The station plays everything from Jazz to R’n’B, all safely vetted for air by station manager Isis, a beautiful black feline.

More discreetly, in the 1960s the CIA launched Project Acoustic Kitty – not merely an unusual codename, but an attempt to use cats as espionage agents. They planned to have them venture on spy missions to the Kremlin and Soviet embassies, primarily to record conversations.

Thinking they had found the perfect spies, due to their small stature, agility, and pure cuddliness, the cats were implanted somewhat cruelly with batteries and microphones in their bodies, and antennas into their tails.

The CIA spent around $20 million perfecting their team, and after several years of test runs they had their first fully operational agent, a grey and white long-haired female.

Doubts arose in her training, as she had a tendency to get bored or distracted, and wander off-course.

For her first day on a mission, she was supposed to be eavesdropping on two men in a park near the Soviet compound in Washington; the cat hopped out of the reconnaissance van onto the street and was promptly hit and killed by a taxi.

By 1967 the CIA admitted defeat and Project Acoustic Kitty was quietly abandoned.



The BACK of Queen Elizabeth II's HEAD.

In 1927 Queen Elizabeth's mother, the then Duchess of York, was required to travel for extensive periods of time, following soon after the birth of her daughter.

She requested photographs be taken of her child from every angle, so she could follow her development while she was away.

Her mother arranged for her to be educated at home; Elizabeth is fluent in French and Latin, besides being trained to carry out her formal duties impeccably. She quickly grew up to become both fascinating and formidable in a number of ways.

Her most practical qualities:

She signals to staff with her handbag.

If she wants to leave a dinner within five minutes, she places her bag on the table.

She moves it from arm to arm if she wishes to alert aides that she is bored of talking to someone, and requires intervention.

She keeps a portable hook with a suction cup in her handbag so she can hang it discretely under tables.

During her coronation, her robes were so heavy she asked the Archbishop of Canterbury to give her a push to 'get me started.'

She did not deliver a Christmas message in 1969, as she felt the public had seen enough of her in a TV documentary that had recently aired.

She banks at Coutts & Co., and has installed a cash machine at Buckingham Palace for convenience.

She worked as a mechanic and truck driver in the Women's Territorial Services during the World War II.



Our Queen likes nothing more than a good laugh.

Her favourite reading are the crime thrillers by P.D. James, Agatha Christie, and Dick Francis.

She wanted to see if she could create a new dog breed, and mated a dachshund with one of her corgis. A 'dorgi' appeared, and there are now three amongst her favourite pets.

She coolly kept a burglar who broke into her bedroom at Buckingham Palace talking on her bed for ten minutes; when he asked for a cigarette, she was able to summon help.

She likes a good laugh:

She enjoyed being denied entry to her private stand at The Royal Windsor Horse Show in 1991, particularly the hapless security guard's explanation "I thought she was some old dear who'd got lost".

After a Royal Command performance, comedian Tommy Cooper asked her "Do you mind if I ask you a personal question?" "No", replied the Queen, "but I may not be able to give you a full answer". "Do you like football?" asked Cooper. "Well, not really", said the Queen. "In that case", said Cooper, "do you mind if I have your Cup final tickets?" They were delivered to him the following day.

She was given one of the first Billy Bass singing fish, and immediately placed it on top of the grand piano at Balmoral.

She giggled uncontrollably when she shook hands with shot-put champion Geoff Capes at the Highland Games in 1982 and their palms stuck together because of the resin he used for better traction.

Her favourite current comedian? Ali G.

She can be the wrong woman to cross:

She snubbed the Wimbledon Tennis Club for 33 years because they displeased her in some way.

A royal footman who poured a little whiskey in her corgis' water bowl as a party trick was rewarded with a salary cut and demotion.

On a state visit to Australia, during an argument with Prince Philip the Queen was seen hurling shoes, threats, and sports equipment, in a regal fury that in another age would have cost someone their head.

"I'm sorry for that little interlude," she later said, "but as you know it happens in every marriage". They have now been together for 65 years, and she admits it was love at first sight when they first met.

She is practical:

She uses Tupperware containers to keep her cornflakes fresh.

She doesn't like alarm clocks and wakes up to her personal bagpiper every morning.

She is perfectly content to be seen wearing the same dress on repeat occasions.

She has been using email since 1976.

When she has a bath on the Royal Train, she invokes a 'no bumpy track' rule.

"She has an astounding air of authority and reflectiveness", wrote Winston Churchill.

At the time, she was two years old.

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Charles Saatchi founded the global advertising agency Saatchi & Saatchi in 1970 which grew to become the largest agency in the world. At the same time Saatchi began collecting art and later opened his first gallery a 30,000 square foot ex-paint factory in Boundary Road, London. His exhibitions have always focused on contemporary artists and Saatchi's *Sensation* exhibition of Young British Artists in 1997 at the Royal Academy, London and at the Brooklyn Museum of Art, New York sparked an explosion of controversy.

Saatchi has been one of the moving forces of the modern age, vigorously shaping the contemporary art world, and was selected by the BBC as one of 60 'New Elizabethans' who has most influenced the past 60 years.



The 70,000 square foot Saatchi Gallery in the Duke of York's HQ King's Road is one of the largest showcases of contemporary art in the world. It has hosted ten of the fifteen most visited exhibitions in London over the past last 4 years in the Art Newspaper annual museum visitor surveys and is amongst the top three most popular museums in the world on Facebook and Twitter.

Saatchi's previous books include *The Naked Eye* which featured remarkable unphotoshopped images, *Babble*, *Be The Worst You Can Be*, and his first book *My Name Is Charles Saatchi and I'm an Artoholic* in which he answered questions from journalists, critics, and members of the public with brutally frank candour.

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