Paratechnology
A Newly Released, 2012 Expose of the Super Technology of the Global Elite and the Antichrist New World Order

THE RISE OF TRANSHUMANISM
(Part 5)
Transhumanism is an international, intellectual, fast growing, cultural movement intending to use a combination of genetics, robotics, metaphysics, bioengineering, artificial intelligence and nanotechnology to radically redesign the make up of mankind. Essentially we no longer need to wait on thousands of years to evolve. Instead we can take our destiny and fate into our own hands, and through technology, alter what it means to be a human. According to Transhumanism we are no longer tolerating the existing design flaws of free will. The belief is that if God is real, he made a mistake in the way he designed us so we are going to recreate this new homo evolutis through the power of technology. This will involve the modification of the human being by genetic engineering (carbon) and integration with machines (silicon).
PARATECHNOLOGY PART 5: THE RISE OF TRANSHUMANISM
1. TRANSHUMANISM INFLUENCE IN THE MUSIC INDUSTRY

The Black Eyed Peas (BEP) “Imma Be / Rock that Body” video is a masterpiece of high tech computer-generated imagery and state of the art digital music production. It is also one of the most blatant examples of Psychological Warfare and deception ever seen in modern mass media.

Transhumanism is the name of a movement that claims to support the use of all forms of technology to improve human beings. It is far more than just a bunch of harmless and misguided technical boffins, dreaming of science fiction movies and making robots.

It is a highly organized and well financed movement that is extremely focused on subverting and replacing every aspect of what we are as human beings, including our physical biology, the individuality of our minds and purposes of our lives and the replacement of all existing religious and spiritual beliefs with a new religion of their own which is actually not new at all.

“The term ‘Transhumanism’ was coined by biologist Julian Huxley in 1957, who defined it as “man remaining man, but transcending himself, by realizing new possibilities of and for his human nature.”

Julian Huxley was the brother of Aldous Huxley, who you may know was the author of the very famous book, “Brave New World”, which is a vision of the future that most people view as “The New World Order” (along with the book “1984“, by George Orwell) a depressing future police-state world in which a one world government uses technology, such as surveillance cameras, psychological warfare (propaganda) and brutal military/police forces to control everyone and everything in this dystopian, fictional world.
The founders of Transhumanism, were highly educated and wealthy individuals of primarily British and European descent. These individuals were what we would call people of the elite, ruling class of society, and their views were absolutely elitist, if not outright totalitarian and fascist in nature.

One of the key concepts of old school Transhumanism was the elitist pseudoscience of Eugenics, or “racial hygiene”, which is a concept that still exists today in the modern, shiny, high-tech version of what is adoringly called Transhumanism, Human+, or H+, by its cult followers.

Eugenics is the study and practice of selective breeding applied to humans, with the aim of improving the species. In a historical and broader sense, Eugenics can also be a study of “improving human genetic qualities. Advocates of Eugenics sought to counter what they regarded as dysgenic dynamics within the human gene pool. Specifically, in regard to the continuation of congenital disorders and factors impacting overall societal intelligence relating to the heritability of IQ.

Eugenics was widely popular in the early decades of the 20th century, but has largely fallen into disrepute after having become associated with Nazi Germany. Since the postwar period, both the public and the scientific communities have associated Eugenics with Nazi abuses, such as enforced racial hygiene, human experimentation, and the extermination of “undesirable” population groups.
The modern mutation of Transhumanism claims to only support “voluntary eugenics”, which sounds much more benevolent than mandatory sterilization and euthanasia of undesirable humans, doesn’t it?

We should all understand that ideas such as “voluntary eugenics” will not be voluntary anymore, if and when the people who believe in these radical ideas get political and financial power. In fact, they already do have substantial wealth and power, and are working very hard to impose this Transhumanist agenda on our world whether we like it or not.

THE PRINCIPLES AND CONCEPTS OF TRANSHUMANISM

Transhumanists believe they are working toward a new and improved existence, leaving everything we have known in the dust bin of history, welcoming a new “Golden Age” of superbeings. They want to become an entirely new species, transcending what we are as humans, using radically advanced technology to achieve their goals. Let’s look at just a few of the primary concepts and goals of Transhumanism.

One of the primary concepts of the Transhumanist agenda is “The Hive Mind”.

“Hive Mind: A type of collective consciousness where individuality is stifled; a state of conformity; also written hivemind”.

“A group of people who give the false impression of being a hivemind e.g. by mindlessly following orders.”

One of the early Transhumanist elites, along with Julian Huxley, was Sir Charles Galton Darwin, the grandson of Charles Darwin, who founded the theory of evolution. Here is one of Charles Galton Darwin’s quotes relating to the Hive Mind:

“There might be a drug, which, without other harmful effects, removed the urgency of sexual desire, and so, reproduced in humanity the status of workers in a beehive.”1

As stated previously, the founders of Transhumanism had elitist views about what humanity should be. This Human Beehive concept has been envisioned by the ruling elite class throughout history as the ideal society. The ultimate slave race, scientifically designed to conform, obey and serve the needs of the elite, worker bees who do not question or rebel.

Transhumanists envision this Hive Mind as being possible when all people across the world can link their minds together using technology, creating a symbiotic existence through the new superintelligence of this collective Hive Mind. Forget about the needs of the individual, it’s all about the Hive. They refer to this collective, superintelligence as the Singularity.

“MURG” is the acronym that Transhumanists use to refer to the “Mind Upload Research Group”.

The Hive Mind, or Singularity, that they are working toward, will occur, they believe, when technology exists that will allow humans to “upload their minds” to an artificial memory device, a sort of global hard drive, so that the combined intelligence of all our minds will create this new superintelligence that is the Singularity, or Hive Mind.
“Instead of meekly worshiping fictional gods, or blindly dismissing the ideals they represent, we should seek to become godlike ourselves. The body is weak, but the mind can be forever. People may die, but they can be preserved and resurrected. This world may in many ways resemble hell, but we can create heaven on earth. The universe may be a place of chaos and entropy, but we can fill it with order and intelligence. Guided by reason and empowered by technology, we can bend reality to our will, and make the impossible possible.”

Transhumanist ideas of becoming gods and having eternal life through technology certainly display an extreme level of vanity. Not just the simple human vanity of wearing nice clothes and putting on makeup to look good – but to BE gods – therefore, rejecting and replacing God, entirely. This is the Luciferian doctrine.

The Transhumanist idea that they call Pragmatic Morality, is simply a recycled and renamed version of the oldest deception in the world, that there is no good or evil.

Here is how this concept applies to the beliefs of the cult of Transhumanism:

“Ethics and morals must serve, or at least not stand in the way of, boundless self-actualization. They should be tools and guidelines for successful living, not instruments of senseless repression. Like the flesh, traditional morality is something to be overcome. There is no ‘Good’ and ‘Evil’; just efficiency and inefficiency; intelligence and stupidity; winners and losers. There is only rational self-interest, and those too timid and ignorant to pursue it. This simple yet profound realization forms the bedrock of an empowered worldview, and is a key step towards achieving enlightenment and transcendence.”

“‘Lucifer’ is the Latin term originally used by the Romans to refer to the planet Venus when that planet was west of the sun and hence rose before the sun in the morning, thereby being the morning star.”

“According to Extropian philosopher Max More, “Lucifer is the embodiment of reason, of intelligence, of critical thought. He stands against the dogma of God and all other dogmas. He stands for the exploration of new ideas and new perspectives in the pursuit of truth.” He is also the archetypal iconoclast, rebel, and adversary (the word ‘Satan’ is from a Hebrew word, ‘Sathane’, meaning adversary or culminiator; in original Jewish usage [see the book of Job], Satan is the adversary, not of God, but of mankind; i.e., the angel charged by God with the task of proving that mankind is an unworthy creation). In the transtopian context, Lucifer represents ambition, rebellion, rational enlightenment, and the dark side of Transhumanism.”

SELLING TRANSHUMANISM TO THE MASSES USING PSYCHOLOGICAL WARFARE

What exactly is “Psychological Warfare“?

Psychological Warfare (PSYWAR) is defined by the U.S. Department of Defense as:

“The planned use of propaganda and other psychological actions having the primary purpose of influencing the opinions, emotions, attitudes, and behavior…of groups in such a way as to support the…objectives.”

“Various techniques are used, by any set of groups, and aimed to influence a target audience’s value systems, belief systems, emotions, motives, reasoning, or behavior.”

This is often referred to as “winning hearts and minds“, or similarly, “Capture their minds and their hearts and souls will follow.”

METACOMMUNICATION

Metacommunication is a natural human communication process, which is as simple as saying, “I love you”, while you are smiling – communication on two levels. Throw in a hug and there are three levels of communicating this positive message.

All communication consists of (at least) two levels. First, there is the “content level” of what is being said, literally. Second, there is the level that Gregory Bateson calls metacommunication, which is the
underlying message or tone of the communication, which can be as simple as a facial expression. We often recognize this as being the “tone” of someone’s voice, or how something is being said. So, you have what is being said, and how it is being said. The tone is actually the “command” portion of communication, because it is designed to instruct or position the receiver (or victim) of the communication to interpret the message in a certain way.

Bateson’s communications theory can help reveal the interaction operating behind the message. Every communication, he claims, has both a report [the actual message] and a command aspect [tone]. While the report conveys information about a state of affairs, the command positions the receiver to adopt a particular attitude towards the report and (leads them to) respond in a certain way. The command element of the message is a metacommunication about the context of the message – the nature of the relationship in which the information is exchanged.

FALSIFIED METACOMMUNICATION – MIXED SIGNALS AND DECEPTION

The point where this becomes falsified metacommunication in mass media is when they include a primary false message in an advertisement or music video, which is designed not only to sell the product, but also to influence the viewer’s attitudes and beliefs.

Daniel Lerner, who was part of the OSS (the predecessor of the CIA), called this the “Black Level” of Psychological Warfare, because it includes:

“Commissions of falsification (lies) intended to deceive the enemy”.

There are many layers of communication in movies, videos, advertising and news media that we usually don’t even realize on a conscious level, and that is what is being referenced to here.

The term, falsified metacommunication, was coined by anthropologist Richard Herskowitz. It can be understood, in part, using the simple example of a con-man:

He shakes your hand, smiles at you and tells you nice things…as he steals your money. It is a strategy of deliberately distracting you from his real purpose or goal by using friendly, charming deception. It is saying one thing, as a way of distracting the victim with deception to make them feel comfortable with the situation, in order to do another thing – to achieve the real goal, which is stealing your money.

For example, say there is a magazine ad with a very beautiful female model, but off to the side you can see the makeup artist standing there putting makeup on another model, who looks like she just woke up. They are letting you in on the joke, the artificial nature and deceptive elements of the ad. This makes you realize that you get it, you think that you understand the illusion, and that makes you feel clever, like an insider, and this feeling gives you a sense of reward and ego boost because you feel smart and cool.

This process has the typical effect of getting people to relax and let their guard down a little bit, which leaves them more open to the actual intent of what the ad is trying to do, to sell you something non tangible that you probably don’t need and ideas that you may not agree with. This brings us to another tool of manipulation and control in communication, known as a double bind.
DOUBLE BINDS

A double bind is a dilemma in communication in which an individual (or group) receives two or more conflicting messages, with one message negating the other. This creates a situation in which a successful response to one message results in a failed response to the other, so that the person will be automatically wrong regardless of their response. The nature of a double bind is that the person cannot confront the inherent dilemma, and therefore can neither comment on the conflict, nor resolve it, nor opt out of the situation.

Falsified metacommunication is similar to this in many ways.

Just understand that this is all about communicating ideas at multiple levels; some true information and some false information, and other levels showing you that they are showing you something, in order to distract you from the real message or purpose, and also to deny what the real purpose of the communication is. It sounds really confusing and schizophrenic, doesn’t it? That’s because it is. More from Richard Herskowitz:

“This schizophrenic system [double binds and falsified metacommunication as they are used in mass media], therefore, bares its exploitative nature to its victims in a manner that evokes their participation in their own oppression. As Anthony Wilden argues: “It is a necessary function of pathological communication to deny its own pathology while admitting and using it at other levels. Thus, since no system [including the human mind] can actually ignore feedback relationships, our culture simply converts them into POWER relationships.

The manner in which the spectator’s recognition of mass media deception is channeled into participation in that deception (is) a false democratization of an exploitative relationship, and is used to position the viewer in a certain way, as a means of controlling how they will receive the message.”

IMMA BE Duplicity

Duplicity is defined as “contradictory doubleness of thought, speech, or action; especially, the concealment of one’s true intentions by deceptive words or actions”. It is saying one thing and doing (or meaning) another…and doing it intentionally, in order to deceive. So, with this idea of duplicity in mind, let’s look at what the different layers of communication in this BEP video are telling us.

One layer involves giving the viewer (victim) a false message that is friendly or they will agree with, to make them feel comfortable. In this video, the false and deceptive message is that they believe it is wrong to replace people with machines and “we’re not robots”. This is established at the beginning, to give the viewer a friendly message that they can feel comfortable about and agree with. Like the con-man, they charm you to disarm you.

But, then you also have Will.I.Am saying how cool it is that the artificial intelligence vocal machine (technology) is going to replace humans, and they won’t have to do the singing anymore. Contradictory messages used to conceal their true intentions = duplicity.

Another layer involves giving the viewer some clues or obvious messages to show them that the video’s story is just a story – by calling attention to itself at the beginning and end of this video and showing you the (false) real life events of the BEPs having their meeting, Fergie’s accident and when they rush to help her at the end of the video.

This method of using the story to call attention to itself is designed to give the victim an added comfort level (remember the first layer above) and a sense of reward or ego boost by giving the victim the illusion that they have figured it out and are “in on the joke”, so that they feel good and smart because they’ve figured it out, which leads them to relax and let their guard down. This is a secondary layer of charming and disarming you.

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But, the most important layer of communication in this video is the story itself, which is shown (falsely) to be “only a dream or fantasy”, which implies that it is not the real message or purpose of the communication. The opposite is true.

This “dream sequence” shows you very clearly with its visual imagery and ideas what the true purpose and message of this story really is. Here is what you are being shown in the “dream”:

Humans are depicted as stuttering, broken, helpless machines that are inferior in every way to the machines. In contrast, the machines are depicted as benevolent and good, and they are shown helping humans to become more perfect beings...by force, shooting them with guns that cure their broken condition. This is a good example of cognitive dissonance, which is another powerful aspect of psychological warfare in mass media.

Cognition is the scientific term for “the process of thought”.

Dissonance is a state of disagreement or conflict between two or more things – things that don’t fit together. In music, dissonance is expressed as being “a mingling of discordant notes, a clashing or unresolved musical interval or chord”. The simplest explanation of this in music is that dissonance sounds bizarre and disturbing to the ear.

Cognitive dissonance is an uncomfortable feeling caused by holding two contradictory ideas simultaneously. The theory of cognitive dissonance proposes that people have a motivational drive to reduce dissonance by changing their attitudes, beliefs, and behaviors, or by justifying or rationalizing them. In 1957, Leon Festinger published his theory of cognitive dissonance, which has changed the way psychologists look at decision-making and behavior. It is one of the most influential and extensively studied theories in social psychology.

Cognitive dissonance occurs when a person perceives a logical inconsistency in his beliefs, when one idea implies the opposite of another. The dissonance might be experienced as guilt, anger, frustration, or embarrassment."

The important thing about cognitive dissonance in mass media is that when a person is confronted with such contradictory ideas, it creates a conflict or disturbance that is usually not even noticed on a conscious level. Instead, it is internalized and processed by your subconscious mind, your autopilot system, in the same way that your autonomic nervous system controls your breathing, heart rate and blinking your eyes without you ever thinking about it consciously.

EXPOSURE AND DESENSITIZATION

The first time a horror movie addict watches their first gory movie i.e “Saw”, they might be freaked out by the gruesome murders and torture. But if they watch it another hundred times, it can be guaranteed that it won’t bother them very much anymore. Over time, when we are exposed to images of graphic violence, sexuality or ideas utilizing combinations of such images (cognitive dissonance) we slowly become desensitized to these ideas, and we are conditioned to stop reacting to them as strongly.

This can be understood in the same way that a person may get a painful sunburn the first time that they are out in the sun too long – overexposure – too much of what you are not conditioned to accept, all at once. But, after being out in the sun all summer long, the skin has become desensitized, or conditioned, to accept the UV radiation, by receiving smaller doses of it, consistently, over a longer period of time. Therefore, the person doesn’t experience the strong reaction (sunburn) that they did the first time.

Of course, this example is one where there is a good aspect to the desensitization – not getting a painful sunburn every day is a good thing. In the same way, allergy shots can help people to avoid severe
allergic reactions, desensitizing them by giving them small doses of what is bad for them, over a longer period of time. Not having severe allergy/asthma attacks is a good thing, too.

But, in the case of mass media and the desensitization of our minds, there is nothing good or beneficial about the way that we are being systematically desensitized to accept a variety of destructive and dangerous ideas. Transhumanist ideas are one example of this – humans becoming more like robots, and robots becoming more like humans.

So, the primary intended message of this video is the Transhumanist idea that humans are not good enough the way we are naturally, and we need to be altered with technological devices and reprogrammed with radically different ideas in order to be better, even if this must be done to us against our will. This idea is dangerously flawed and it is a complete dehumanization of our species, as well as being a very troublesome vision for the future of humanity.

**IMMA BE / ROCK THAT BODY VIDEO ANALYSIS**

The Imma Be / Rock that Body video begins with all of the Black Eyed Peas (BEPs) sitting in an office, talking and working on ideas. The main guy, Will.I.Am, is sitting at his computer looking at images of robots. You can also see the speaker cone sound cannon laying on the table, which foreshadows the events in the “fantasy” part of the story to come – showing you that this object from the “fantasy” part of the story actually exists in the (false) “real” story. And, because you will find out later that all of what is yet to happen is depicted as being just Fergie’s dream, this is part of the false metacommunication that is being used not only to give you a hint about the fact that the entire video is just a story, but also to deny the true deceptive message that is contained in the “dream” segment of the story.

It is a scene within the fictional “real life” part of the video letting you know that the whole video/story is fictional. A deception within a deception – an object from the “dream” part of the story somehow exists in this false “real life” part of the story – which is a) using the story to call attention to itself, and b) to further the deception about what the message of this story actually is.
Will.I.Am tells everyone he has something cool to show them, and he takes out one of those high-tech aluminum CIA type briefcases and opens it up. The other Peas ask what it is, and he tells them that it is a machine with artificial intelligence (AI) that will sample your voice and allow you to just type in the lyrics and it will “do all the singing, talking, rapping”. He says that it is the future and it is what will take the Peas into 3008…which is kind of funny, and very optimistic as far as being able to live that long without some kind of radical technology that could keep you alive for 120+ years.

This false “reality” scene continues with another BEP asking Will if this means that he won’t actually be rapping in the studio anymore, and Will explains that, no, he won’t be doing the rapping because the machine will do it all, which Will thinks is very cool.

Then Fergie gets really mad and puts on a big drama queen display. She says “it will take the soul out of it” and “it’s not real”, and finally she says, “We’re not robots!”, and leaves the room pissed upset. This is another layer of the false metacommunication that is using the false “real life” part of the story to deny the true message that is about to begin in the “dream” part of the story. So then, Fergie goes outside and jumps on her awesome motorcycle, and takes off down the road. But she doesn’t get very far, because in her anger, she rides straight into the path of an oncoming vehicle..

Poor Fergie. It looks like she has now become the cutest roadkill ever. But wait. She’s no longer in the city, where the accident happened. Now, she is suddenly in the middle of nowhere, in the desert. And this image is especially symbolic – the awesomely cool high-tech machine standing upright (not on the ground as it would be after an accident) in a superior position, casting its ominous dark shadow down upon the apparently dead human lying on the ground. The machine killed the human. Get it?

The Transhumanist Song Meanings

This BEP video uses the songs “Imma Be” and “Rock that Body”.

In terms of Transhumanist meanings, I believe that “Rock that Body” means “change and improve the human body”; i.e., improve the flawed, human meat machine using advanced technology, as we see in the video.

What I find very interesting about the song “Imma Be” is that I believe it is saying, “I’m a Bee”, literally. Obviously, I do realize that “Imma Be” is used as a slang way of saying “I’m gonna be…(this or that)”, or “I am going to be…”. But it is pretty clear from the opening scene in this video that Will.I.Am is an intelligent and well spoken guy, so the point being – the use of this phrase is intentional, and it is used for specific reasons. One of those is probably “street credibility”, but I also think it is being used deliberately to create the literal meaning, “I’m a Bee”.

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**The Black Eyed Peas**

*Imma Be* Rocking That Body Megamix EP

PARATECHNOLOGY PART 5: THE RISE OF TRANSHUMANISM
The way this song beats the phrase “I’m a Bee” into your mind like a hammer is significant. Probably a hundred or so times in about four minutes. So, it seems pretty clear that it was an important message that they wanted to get across.

So here’s Fergie, looking all better now, thank goodness, and she begins singing...well, rapping the lyrics. You would notice that her outfit gives the appearance of a robot face, with the round eyes being her breast areas and the square black mouth is a piece of fabric or tape. Also, notice that behind her is the giant bad Borg. He drops in for the first time here.

Fergie is now walking toward the diner, which is flanked by the TUBORG beer signs, as well as the BEP album cover image. The album title, “The E.N.D.”, is interesting, not only because of the obvious “The End (of the World)” idea, but also because it means “Energy Never Dies”. This has some obvious spiritual and reincarnation components.

Some Transhumanists are into cryogenically freezing and storing their heads (Cryonics) when they die, because they believe that technology will exist in the future to bring them back from the dead. Thus, Energy Never Dies.

Near the diner is a large graveyard of obsolete and broken machines. Keep this in mind. He’s half the man he used to be...and he doesn’t have a leg to stand on! This is symbolic of dehumanization and mutilation, pure and simple.

Now his parts are back together again...he's “fixed”. Note the scattered “body parts” of the obsolete and broken hardware in this machine graveyard.

Happy Borgs dancing like humans, amongst the obsolete and broken machine parts. The Borgs act like humans, the humans act like Borgs = cognitive dissonance.

IMMA FIX HUMANITY: ONE BORG AT A TIME
The BEPs are then beamed down into the city, and they’ve become Borgs; enlightened and better, smarter, faster. They fall from the heavens down to Earth in blinding flashes of white light, like a morning star (small hint there).

The Erkel brothers are stuttering, broken humans. They are imperfect, and need “fixing”

Will.I.Am with heavy weaponry, illuminated for his mission to “fix” humanity – he’s ready to strike that (human) body with his awesome speaker gun. The humans in this video are all stuttering and broken machines that need to be fixed and improved.

Police-state and New World Order/Brave New World themes are very prominent in this video. The speaker cones replacing the usual gun barrels is very clever, and cool looking. It implies a combination of our sense of hearing and the presence of the guns and authority figures (soldiers and police) – so it has a sort of “Now hear this! tone – speakers, sound, hearing, authority, guns, obey.
But, these sound cannons are good things in the video (cognitive dissonance) because they are “fixing” the broken humans – by force, of course. There is no indication whatsoever that the humans have any choice in the matter.

All the Erkel type stuttering humans in this video (who are stuck and cannot move forward without Transhumanism) love the “gift” that they are given by the enlightened BEP Borgs, and they don’t resist at all. They apparently want us to see that resistance is futile, and that we can’t fight the future. As Will.I.Am says at the beginning of the video, “You can’t be futuristic and be afraid of the future.” If the Transhumanists get their way, there’s plenty of reason to be afraid of the future.

The BEP borgs know what is best for you, just look at their loving, happy guns! They are aiming their Transhumanist ideas at you, and you need to be shot for your own good. They don’t look too happy about it, either.

The entire second part of this video has a very serious tone, which is a little odd considering that they are portraying their acts as kind, wonderful, and liberating humanity – once again, that is cognitive dissonance.

The discerning will detect the fascist police state/sexuality cognitive dissonance here?? Pleasure and punishment…

Then the bad Borg and the good Borg and the BEP Borgs and the new and improved humans are all dancing together and everyone is happy. We’re from the government, and we’re here to fix you!! We’re going to give you the future you deserve.

The giant Borgs are having a dancing contest. So, in this scene, the giant robots are dancing like humans. And the humans are dancing like robots. That’s usually thought of as a juxtaposition, but in this case it is also very much used as cognitive dissonance to leave a deeper imprint in the viewer’s mind, due to the conflicting ideas that are shown.

These kinds of ideas are used constantly in mass media, for exactly this reason – they force the viewer at an unconscious level to reconcile the conflicting images and ideas, rationalization, such as Fergie’s...
sexual attractiveness while carrying guns and shooting people…and machines dancing like humans while the humans dance like machines.

So here at the end, the bad Borg apparently danced himself to death? The story itself didn’t make it clear why he died so suddenly at the end, but it obviously represents the old, inferior technology (humans) dying because it could not keep up and couldn’t handle the future, and it is being replaced by the forces of new and improved, enlightened technology.

The good Borg and the BEPs and the new and improved humans have survived, because they have embraced the future in this new “Golden Age” of Transhumanism.

And, this is also just another version of the typical Hollyweird forced “happy ending”, to give the many clueless viewers the illusion of relief after the hurricane of cognitive dissonance they have just witnessed in this video. The twist here is that most viewers probably don’t realize that they have just watched their own race being killed here, and replaced by the Transhumanist vision of superintelligent, superhuman beings. This ending really drives home the primary deception in this story, and how powerful and effective these tools of Psychological Warfare truly are.

The idea of transhumanism has been circulating in mass media outputs, especially movies, TV shows and music videos. Imma Be /Rock that Body is of many videos portraying the upgrade of human beings to a super-robotlike status. The repeated recurrence of this theme simply cannot be a coincidence. It is rather the result of a steady agenda of desensitization, predictive programming and good old fashioned marketing. The trend is not about to die.
The music industry is marketed towards the youth, and this is done on purpose. Whether or not there is an Illuminati secret agenda doesn’t really matter, what matters is that there is definitely something going on that influences our culture and people from the most impressionable young ages. One of the newer trends is in pushing the cyborg, transhumanism movement. Ray Kurzweil has written several books on this subject and they discuss the future of our world in which robots merge with humans to move our evolutionary process along. It’s obvious that technology is advancing at an ever increasing, exponential rate (see Moore’s Law), but what happens when we perfect technology to the point that it can become self aware and replicate itself? Kurzweil discusses this topic in the world of nanotechnology. Once we create nanobots that are able to self replicate, we’ll be able to implant them into our bodies to augment our physiological processes and keep an eye out for, and destroy any cancers or diseases (see RNA Interference).

Kurzweil also predicts that we’ll be able to implant internet accessible systems in our head so that we can surf the web through simple thoughts with a small screen implanted in our cornea to view the screen.

With all of this being said, there is a push by the entertainment industry to “normalize” these cyborgs and human/robot hybrids. The subconscious is learning and seeing things that our conscious brain does not. Just because they’re not overtly yelling, “Hey, augmenting your human body with robotic parts is ok!” doesn’t mean that it’s not happening. Our brain filters out up to 99% of what’s going on around us. Carl Jung was a psychoanalyst who spoke of synchronistic events, where you are able to basically shape your world through your thoughts (see Synchronicity, or the works of Carl Jung) Children are able to project themselves into an imaginary world when they play with toys and as they get older that imagination begins to fade away. The music industry appeals to this younger audience and seeks to grab their imagination so that they can influence their subconscious by way of repeated mantras. Keep an eye out on music videos, artwork, and album covers. Not only will you see the Illuminati symbolism, but you’ll notice a theme of robotic humans.
2. TRANSHUMANISM IN POPULAR CULTURE

Perhaps the most renowned example of transhumanism in the popular science fiction of the past two decades (so much so that two of the episodes in which they have appeared have been voted as favorites among fans) is the alien race known as the Borg of Star Trek: The Next Generation and Voyager. The Borg were first introduced in the episode “Q Who?” when an entity known as “Q,” claiming to be omnipotent, flung the starship Enterprise half way across the galaxy in the attempt to persuade Captain Picard that Q could be an indispensable member of the crew.

The Borg would receive their most definitive treatment in the two-part episode “The Best of Both Worlds.” From these episodes and all the interpretative modifications that would follow, the Borg would go on to rank among the most intriguing of Star Trek species.

One of the aspects of the series that has enabled Star Trek to maintain a degree of popularity over the decades has been the detailed alien cultures that have been developed to serve as antagonists or as narrative devices through which to explore a variety of issues. For the most part, these have projected human characteristics against a larger cosmic backdrop. For example, the Klingons exemplified a culture obsessed with honor and military glory. The Bajorans exemplified the struggle that the deeply religious people face when confronted with a rapidly secularizing culture. The Vulcans epitomized what could happen when logic is emphasized at the expense of emotion. However, as an adversary, the Borg—despite a basically humanoid appearance—were about as alien as you could get.

What set the Borg apart from most other species in speculative fiction was not their biology per say, but rather their mode of being or consciousness. For though a viewer might be startled by the appearance of a Klingon or a Ferengi, what one would be seeing, though perhaps slightly different in terms of values and appearance, is still a fellow creature that perceives the universe independently within his own mental framework and is concerned to a lesser or greater extent about his own continued existence. What made the Borg provocatively unsettling as a science fiction adversary was the concept of the collective.

For years, analysts mired in conventional thinking, assured that communism was dead and would never again threaten the free people of the world. The Borg presented a scenario whereby this ideology could resurrect itself as a threat from a transhumanist perspective.

As with the Secular Humanism and the New Age (or Cosmic Humanism as it was termed by William Nobel in his monumental opus of worldview analysis Understanding the Times), transhumanism diverges into two extremist streams. Neither of these are ultimately beneficial to humanity if the purpose of this technology is to enhance the species beyond its inherent specifications. There is a totalitarian transhumanist strain and an anarchistic transhumanist strain.

The Borg represent the totalitarian strain of Transhumanism. It is quite obvious that the name “Borg” is derived from the word “cyborg,” which has come to categorize an entity whose physical components are as much robotic and mechanical as they are biological and organic. However, the greatest atrocity committed by the Borg is not so much that they impose these cybernetic enhancements against the will of those forced to undergo these procedures, it is that the Borg obliterate, or at least sublimate, the sense of individuality altogether.
Through the systems of censors and processors placed within the bodies of those taken in by or assimilated by the Borg, the individual is incorporated into the Borg group consciousness known as the “collective.” Thus, a number of encounters with the Borg decisions by the species were not made by a singular leader or council of individuals, but instead by the group as a whole. The primary reason for abducting Captain Picard and turning him into Locutus, apart from gaining intelligence on Federation strategy and tactics, was to have a singular voice to represent the Borg to “archaic cultures which are authority driven.”

Some transhumanists might view this as a great leap forward in terms of expanding political awareness that would allow all members of a group to participate in arriving at a decision approaching consensus rather than one arrived at by a singular leader that might not take varying perspectives into account. However, what some transhumanists might consider the ultimate communitarian democracy comes at what those echoing Lt. Worf’s retort of “I like my species the way it is” consider too high of a price.

This communal solidarity is achieved through a fanatic technological suppression of the self. This is done to such an extent that drones disconnected from the group consciousness fall into a disoriented state, quite similar to a form of drug withdrawal, continuing to use the pronoun “we” when talking about the individual self and expressing a sense of loss bordering on grief at no longer being able to hear in their minds the voices of fellow Borg. The Star Trek: Voyager character, “Seven of Nine,” even continued to prefer that particular numerical designation, rather than reclaim her human name, and at times considered abandoning her reclaimed individuality in order to rejoin the Borg group mind.

A person’s sense of self is not the only thing threatened by the use of transhumanist technology for the purposes of seamlessly incorporating the singular person into the larger social organism whether they want to be or not. By minimizing the distinctiveness of each individual within the context of the larger group, even if one claims to be elevating the status of everyone by ensuring that each voice plays a part in determining the overall consensus, this notion of the ultimate communal entity having the only real value minimizes the worth of any of its singular components to the point of fostering a mentality of easy bio-disposability.

When a Borg falls in battle, the body is not respectfully retrieved, even when comrades are nearby. Rather, data components are extracted from the corpse with the remains at best reclaimed for what it can “give back to the community.”

One often finds this kind of bait-and-switch in certain brands of pantheism. One might have the guru or, even in certain instances now, powerful cultural institutions (such as academia or the media) whispering in your ear that you, as part of the universe, are a part of God. Such voices then turn around and craft intricate policy proposals as to why the elderly should be rationed medical care or that Genghis Khan ought to be considered some kind of ecological visionary for having slaughtered millions of people.

As with other faiths and creeds, transhumanism can be viewed as having a number of denominations. Those bending their knees to the Borg as the patron saint of the Church of Our Beloved Central Processor believe that merging man and metal (or at least high grade plastics) ought to be the path pursued to take the species to the level beyond the merely human. The second path in pursuit of this goal believes it will be best achieved, not so much by incorporating or grafting inorganic components onto human beings, but rather by directly tinkering with the genetic blueprint already there to advance the capabilities of individuals to levels beyond that of baseline humans. This would be accomplished in part by adding genes from other species into the code for human beings.

This brand of transhumanism, where the subject itself is enhanced instead of relying on external technology, is likely the version of the perspective the average American is most familiar with. It, after all, forms the backbone of many classic superhero comic books, movies, and television series. The disturbing thing of it is that there are now scientists and policymakers that want to take these stories from
the realm of the imagination and make them a concrete reality, even though the tales themselves often warn of undesirable consequences no matter how enjoyable it might be to swing from the New York skyline or to smooch a sopping wet redhead while dangling upside down from a fire escape.

In most heroic graphic literature narratives, powers and abilities are imbued upon the protagonist through accidental circumstances. Foremost among this variety of costumed adventurers rank Spider-Man (bitten originally by a radioactive spider but interestingly in the movie series by a hybrid arachnid engineered through genetic experimentation) and The Fantastic Four (who acquired their abilities as a result of bombardment by cosmic rays while blasting off into outer space). However, the implications of having these enhanced abilities from the moment of conception, either as a result of conscientious deliberation or as a result of the fortuity of insemination, have also been explored.

The series Dark Angel chronicled the adventures of a young woman who had been genetically engineered—largely through an infusion of feline DNA—to give her enhanced reflexes and senses. In similar stories from previous decades, these procedures were often undertaken for the benefit of the individual such as The Six Million Dollar Man (which these days would have gotten astronaut Steve Austin mediocre medical care for that paltry sum) and the Bionic Woman. Neither of these would have survived without extensive technological intervention. In the case of incidents like these, it is likely those involved would provide some degree of consent to have their physiologies altered so drastically. Dark Angel warned, however, that there could be organizations and institutions possessing this technology using it not so much for the benefit of those it is applied to, but rather for the sake of an elite and whatever agenda such conspiratorial entities might be pursuing.

Another interesting aspect of the series is that, unlike Star Trek, which takes place in a milieu centuries apart from our own, Dark Angel is set in a world likely to come about in a few short years. In the series, the United States has fallen victim to an electromagnetic pulse attack that cripples much of the nation’s electronic infrastructure. The government agency behind the project is known as “Manticore,” which according to Wikipedia is a creature from Persian mythology composed of parts from various animals such as the body of a lion, a tail of scorpion, and the head of a human (making its description similar to the locust monstrosities mentioned in Revelation 9 that plague those that do not have the name of God sealed on their foreheads). In the second season, it was revealed that Manticore was just the tip of the iceberg and something of a front for a secret society involved in genetic experimentation and selective human breeding spanning back centuries.

The series, however, was not without a ray of hope. It was likely one of the first to feature as one of its protagonists a citizen journalist or blogger using what were at that time technologies just beginning to be used in the capacity of alternative media.

One the fictional milieus that has explored the notion of enhanced human beings to the greatest degree has been that of the X-Men. A part of the Marvel Comics “multiverse” including characters of other enhanced ability such as Spider-Man, The Fantastic Four, and The Incredible Hulk, the X-Men also stand apart from their other superhero counterparts in terms of how most of these characters acquired their underlying augmented aptitudes.

In interviews regarding how he came up with the origins of the X-Men, their creator, Stan Lee, decided that they were simply born that way as genetic mutants so he would not have to come up with any more elaborate accidents. Though he might have done this for the sake of literary expediency, it also provides
insight for the average person perhaps not scientifically or esoterically inclined into yet another school of thought as to how enhanced human beings might come into existence.

In the cases of both the Borg and Dark Angel, people transcending the limitations of the species are brought about through directed, deliberate intervention. However, with the X-Men, these abilities and differences come naturally, usually at the onset of puberty or even from birth, if the character in question possesses an appearance markedly different from template human beings. Thus, the X-Men and those like them, in the context of the Marvel narrative universe, are seen as numbering among the next stage of human evolution and are given the scientific designation of “Homo Superior” (the name given to mutants in Marvel Comics). This would not be all that different than those that think so-called “Indigo Children” represent a leap forward beyond that of their parents.

As intriguing as the perspective is that mankind might not have to intervene in order to bring about our next biological paradigm but rather that it will come about at an unexpected moment like Goldsmidt’s Hopeful Monster hypothesis or at a time when the cosmos itself either deems it consciously or through a confluence of fortuitous happenstance, the greatest contribution made by the X-Men in considering the issues of human enhancement is in the comics’ exploration of how these advances would complicate sociology and politics. Often, comics follow a traditional hero-versus-villain narrative. X-Men, in part, contributed to expanding the perception of those archetypal categories.

Inspired by the social upheaval of the 1960s, and long identified with by the most enthusiastic of comic readers who often find peer acceptance elusive, the X-Men have often been depicted as a band of outcasts or even outlaws. Typically in the Marvel universe, mutants born with their powers are viewed with suspicion and are not to be trusted because of the drastic differences setting them apart from the remainder of the population. Even though such an attitude might strike the reader as prejudiced, as evidenced by the numerous mutant characters mistreated throughout these stories, such suspicions are not without warrant.

From that brief description, those unfamiliar with the X-Men might assume that the bitterest foes of the X-Men would be anti-mutant human beings. If anything, the X-Men are caught in the middle and just as likely to take on foes of enhanced abilities much like their own. For example, Magneto is a survivor of the Holocaust who, in the attempt to prevent enduring such a tragedy a second time, has at times adopted a militant mutant-supremacism not all that distinguishable from the Nazism that wreaked so much havoc in his own young life. Then there is Mr. Sinister, obsessed with genetic experimentation and unbridled by any ethical boundaries whatsoever. Finally, there is Apocalypse, who has essentially lived through all of human history from ancient times, seeing himself as sitting above both human and mutant kinds doing with each as he pleases.
As a highly-imaginative comic franchise, X-Men provides a number of points for Christians to ponder. Professor Charles Xavier and his Institute for the Gifted (of which the X-Men exist as its covert elite arm) endeavor to foster acceptance and peace between mutants and humanity, which the X-Men view mutantkind as a part of, rather than as a distinct species. The perspective that mutants and human beings are essentially the same is also shared by the mutant-hunting artificial intelligences known as the Sentinels which turn on their human creators at some point in the future when their dispassionate robotic logic concludes that the enhanced and the unenhanced are at the deepest levels one-in-the-same.

Thus, if humanity is successful at some point in the future at enhancing the species at such a foundational level, the church is going to have to grapple with just how much of the genetic code can be tampered with before it is no longer human.

This would be of particular relevance in reference to those that have undergone such procedures who may still identify as being human, those who repent in their hearts for having undergone these transformations, and most importantly, those who may have been born through no fault or choosing of their own to altered human parents and who may sincerely want to accept Jesus Christ as Lord and Savior. Even those that have enjoyed speculative fiction their entire lives are going to be shocked the first time they see someone looking like the male lead from The Beauty and the Beast walking through the church lobby.

Since the primary emphasis of most popular speculative fiction is the action and adventure, sometimes the why and for-what-purpose often gets glossed over by the captivating pyrotechnics and spellbinding special effects. Often, it was assumed, hinted at, or alluded to that those altering the human species were doing so solely in the name of materialistic purposes. However, a number of popular television programs have suggested that radical intervention into what it means to be human might be undertaken in the attempt to bring those undergoing the process closer to what such individuals perceive or understand to be “God.”

Even in its late 70s incarnation, Battlestar Galactica possessed an openly spiritual bent, borrowing that inclination from Star Wars with its emphasis upon the Force, rather than the galactic-pluralism of the original Star Trek, which emphasized tolerance between sentient species rather than the existence of an overarching metaphysical reality beyond a nebulous declaration of generalized principles. However, unlike Star Wars with its notion of a ethereal dualistic spiritualized energy field that “surrounds us, binds us” (as Yoda intoned in The Empire Strikes Back), the original Galactica was far from shy in borrowing concepts nearly directly from Mormonism, such as wandering tribes on an “exodus” to find the Promised Land of Earth that the forefathers of humanity began on the planet Kobol (the homeworld of Mormonism’s god-being, Kolob), and the idea epitomized in the scene where the angel-like beings told Starbuck and Sheeba that as these entities are, humans would one day become.

The reimagination of Battlestar Galactica retained a spiritual tone, though it was taken in a slightly different direction. In the new version, the faith most often expressed among the majority of the population of the Twelve Colonies is a form of polytheism borrowed nearly word for word from Greco-Roman mythology. However, the most intriguing philosophical addition of the series was the exploration of Cylon religion.

A classic science fiction book title inquired Do Androids Dream of Electric Sheep? The producers of the reimagined Battlestar Galactica might not have answered that query directly, but they did suggest that Cylons spent considerably more time cogitating upon theology since their earlier days when they primarily resembled teakettles with anger management issues than most of us realized.

Yet, whereas the Colonials were portrayed primarily as polytheistic in their religious orientation, the Cylons (especially those in the form of bioengineered clones that were virtually indistinguishable on the outside from human beings with the exception of the characteristic red light that pulsed up and down
the spine when overcome by the throws of passion [not unlike Chris Matthews' leg during an Obama Speech]) were radically monotheistic.

By the end of the series, through a revelation of two beings conceptualized as angels for lack of a better term, it was made known that the entire epic was part of some divine plan where the band of humans from across the cosmos would come to earth and, as viewers learned from the Patrick Macnee voice over intro to the earliest episode of the original series, “who may have been the forefathers of the Egyptians... or the Toltecs... or the Mayans.” However, apparently it was not enough to end the series on the note that humans walking the earth today are the descendants of the intermingling of the native hominid population found here on earth and that of a prior advent of a species virtually identical to our own. Rather, it was hinted at that the hybrid human/Cylon child Hera was actually a mitochondrial Eve, from which every last person on the planet can trace their origin.

All quite fascinating, the reader might think, but what does any of this have to do with human enhancement. In the reimagined Battlestar Galactica, rather than being an external menace alien to humanity in accordance with fears prevalent during the time of a more publicly acknowledged Cold War, it is emphasized in the new version that the Cylons were a human creation that turned against their masters. However, in the short-lived Galactica prequel titled “Caprica,” in honor of the capitol world of the Twelve Colonies, we learn that the Cylons were not developed solely as a result of military or industrial interests. A spiritual component also contributed to this breakthrough in artificial intelligence that was initially thought to assist in helping at least a select few surpass the limitations of human existence.

Echoing shades of Greco-Roman times, the polytheist establishment of Caprica, if not outrightly persecuting followers of “the one true God” derided as Monotheists, looks askance at the adherents of this faith centered around the colonial world of Gemenon. However, echoing concerns of our own day, such suspicions are not without warrant, because within the Monotheistic movement is a faction known as the Soldiers of the One that utilize violence to further the group’s agenda.

At the beginning of the series, Monotheist Zoey Graystone, who thinks she is running away to Gemenon, is killed in a terrorist attack perpetrated by her own boyfriend. However, that was not the last viewers would see of Zoey or at least what was portrayed as her semi-autonomous facsimile.

As the story unfolds, it is revealed that Zoey was something of a computer-programming prodigy and was able to replicate an interactive avatar of herself in V-World, a digital realm that combines the social aspects of the Internet with the tangible interactivity of the Holodeck from Star Trek. Eventually, Zoey’s mentor, who turns out to be a member of the terrorist faction, finds out about the sentient avatar and believes it is the first step to achieving her goal of a state called “apotheosis.”

As with other terms in science fiction that sound like conceptual drivel to the unsuspecting ear, “apotheosis” is a notion increasingly bandied about in circles where philosophical and religious thought overlap with technological speculation. Like Sister Clarice (Zoey’s mentor), proponents of apotheosis in transhumanist circles hope to transcend the limitations of human temporal corporeality by essentially uploading the human mind or soul into some kind of computer or autonomous android by copying the memories stored in our brains as electrochemical impulses.

While you would still technically die eventually as a biological organism, postmodernist thought has so unhinged itself from biblical concepts of what constitutes life and existence that many would be hard-pressed to refute why an android with a sufficiently complex degree of computer processing power thinking it was you theoretically with all your memories shouldn’t simply be considered an upgraded version of yourself.

The humans of the early 21st century look upon all the grandiose predictions made by science fiction authors and analytical futurists and see, for the most part, that at our most basic despite all the advances
in technology and culture, we are pretty much as we have always been throughout recorded history in terms of our fundamental nature and composition. Another subgenre of science fiction suggests that enhancement will not come about either through our own efforts nor spontaneously on its own. Rather, such stories speculate enhancement will come from efforts directed by intelligences from what would be considered beyond the earth.

Though by no means the only example as this general theme has just about become so clichéd that there is almost the danger of it no longer sparking the imagination the way it once did in terms of stimulating discussion as to both the origins and future of humanity, a prime example of this kind of series would be Gene Roddenberry’s Earth: Final Conflict. The opening narration of the series intoned, “Three years ago they came, forever altering the future of humanity.”[210]

Thus, Earth: Final Conflict dealt with mankind’s first contact with extraterrestrials from beyond our world. Though the aliens possessed technology vastly superior to our own, which they claimed they wanted to share with us out of their own sense of altruism, it isn’t long until it is realized, at first by a small cadre of resistance fighters, that the “Companions” (as these nonterrestrial entities are initially construed as) need us far more than we need them. However, Earth: Final Conflict was not so much the standard “aliens trying to take over the earth” epic, as it was one about aliens coming to earth to manage and manipulate mankind as a pharmaceutical livestock crop.

Though technologically advanced, because of pursuing a Gnostic evolutionary course eschewing the material body in favor of existence as beings composed more of energy than physical substance, the Taelons discover that they are no longer able to reproduce their species. Thus, one of the primary reasons for coming to Earth was to utilize the human species to overcome this quandary.

Part of the downfall of Earth: Final Conflict was the failure of producers to stick to innovative plotlines to their ultimate fruition. One introduced at the conclusion of its first season to cover over the departure of the program’s lead male protagonist provided a scenario as to how beings from beyond the earth might be the ones responsible for bringing about the enhancement of the human species.

Around the time of the first season finale, it was revealed that the Taelons are not the only other sentient species besides mankind in the cosmos, nor are human beings the first manipulated for their purposes. Out of suspended animation comes a similar entity composed of an energy-based physiology, but unlike the Taelons, this one—known as a Kimera and considered to be an evolutionary predecessor or at least genetic contributor to the Taelons—is in no need of interstellar Viagra. By first mimicking the appearance of an unsuspecting male host, the alien is able to seduce a human woman and cause her to be found with child. In order to provide a “totally plausible” explanation for the new male lead to assume his role, the child fully matures in a matter of fifteen to thirty seconds upon being born.

For a few episodes at least, before this conceptual element was downplayed before it was resurrected ironically as a way to write out this thespian as well when the production company decided to dump the American cast members in favor of a Canadian ensemble, the nature of this character (Liam Kincaid) was examined. Apart from the energy bolts that could be discharged from his palms as a defensive mechanism, one intriguing concept was that the extraterrestrial component of his physiology was centered within a third helix to his DNA. As many will recall from encounters with their high school biology texts or A&E and the Discovery Channel before these networks developed obsessions with fishing trawlers, junk peddlers, and overly-tattooed fugitive retrieval agents, DNA is renowned as a double-helixed molecule.
3. TRANSHUMANISM AND THE GENETICS REVOLUTION

Look up "transhumanism" in Wikipedia and you will find an extensive entry, with enough hyperlinks to keep you occupied for a very long time. Wikipedia tells us that "the contemporary meaning of the term 'transhumanism' - which is now symbolized by H+ (human plus) ... (is) an international intellectual and cultural movement that affirms the possibility and desirability of fundamentally transforming the human condition by developing and making widely available technologies to eliminate aging and to greatly enhance human intellectual, physical, and psychological capacities."

The transhumanists believe that we should use the convergence of new technologies, such as nano-, info-, bio-, neuro-and robo-technologies, which are unprecedented in human history, to evolve beyond being human. They advocate changing ourselves from Homo sapiens to Techno sapiens. Transhumanists see us as presently in the transhuman stage on our way to becoming post-human - that is, not human at all. They describe natural humans - whom they refer to as "unmodified humans" - as "becoming an obsolete model."

Transhumanists know that many of their ideas frighten people and have taken steps to reduce this fear. For example, "in 2008, as part of a rebranding effort, the World Transhumanist Association changed its name to 'Humanity+' in order to project a more humane image."

Another fear-reducing strategy they've employed is to argue they're not proposing anything radically new or different, because we have already set out on the path to a post-human future, in that we are using technology to enhance and extend our human capacities, for example, cell phones, the internet, medical prostheses and so on.

They also point out that we have always done so - for instance, with reading glasses or dentures. They propose that the latest possibilities are just more advanced examples of the same phenomenon made possible by remarkable advances in science. In short, they argue that what they are advocating is not different in kind from what we've already accepted as ethical and desirable and, therefore, any fear is mistaken.

As well, the transhumanists rightly believed that the one idea everyone would buy into was life extension, or even immortality, and they intentionally put this front and centre of their agenda. They propose two approaches to achieve this.

"Life prolongation" repairs nature as it fails with regenerative medicine, including organ transplants, stem-cell therapies, and so on. "Age retardation" envisions a future in which the genes that control aging are reprogrammed so we would reach puberty at say 40 years of age or later, middle age around 150 years, and old age well into our hundreds and perhaps, eventually, not at all.

Consequently, transhumanism could be viewed as a "techno-utopian, secular religion": Like many religions, it seeks and promises immortality through transcendence and transformation, but realized through science, not traditional religion.

Because we all have a natural fear of death and annihilation, immortality is a very attractive concept. But would the new immortal "techno me" or "techno you" - our brain contents downloaded onto a computer or robot - truly be us, or just a machine? I believe we would be the latter. And that brings to mind the
concept of "genetic reductionism" - the belief that we are nothing more than gene machines or "genes-R-us" - which I also reject.

Some transhumanists describe people who oppose their goals as "technophobic" and "neo-luddite" (the scientific equivalent of calling someone a dinosaur). For instance, I've been labelled in an editorial in Nature magazine, as "Canada's neo-luddite bioethicist."

Let's be clear. There is an enormous amount of good that can be achieved with our new technoscience, especially regenerative medicine. The issue is where we draw the line between ethical and unethical use of it. One approach which is helpful is to ask whether we are using it to repair nature when it fails or to do something that is impossible in nature. The former usually raises far fewer ethical concerns than the latter, although, of course, it's not the only relevant question in deciding on ethics. However, "transhumanists see the very concept of the specifically 'natural' as problematically nebulous at best, and an obstacle to progress at worst," and "the natural" as having no inherent moral value.

Another distinction that might help to distinguish ethical technoscience interventions from unethical ones is whether the intervention affects the intrinsic being or essence of a person - for instance, their sense of self or consciousness - or is external to that. The former it is proposed, are always unethical, the latter may not be.

Which leads to a related issue at a much more general level: transhumanists do not accept that there is any "essential natural essence to being human" that must be respected, an essence that we believe we must hold on trust, untampered with, for future generations. It is difficult to define what constitutes this essence, without referring to a soul or at least a "human spirit" - the latter of which does not require any religious belief, but does require that we see ourselves as more than just machines. The fact that at least a large majority of transhumanists are atheists and they do see humans as machines might explain, in part, why they believe no such respect is required.

Failing to see humans as "special," as compared with other animals or robots and, therefore, deserving of "special respect" is currently "the world's most dangerous idea," not least because it would mean the transhumanists could proceed unrestricted with their human remodelling project. But there are also much subtler expressions of the same philosophical mindset.

Probably most worrying of all, with respect to interventions on the essence of our very being, are those with a goal of enhancing people's mental or moral capacities. Neuroethics is a new field of applied ethics looking at issues raised in this context. Transhumanism, again like many religions, seeks to create the morally perfect human. Transhumanists argue post-humans will be more ethical and moral than present humans, that wars and conflicts will cease, and so on. Consequently, one of their special concerns is how to ensure people in all socioeconomic classes and countries will have access to human enhancement technologies.

But, leaving aside the reality that even such laudatory ends do not justify unethical means, other possibilities are not so benign. They include mind control, loss of the basis for both free will and the liberty and equality of all people (a person designed by another is not free to become her authentic self, which is the essence of freedom, and not equal to the designer), or creating fearless soldiers, who are devoid of the human moral intuition that it's wrong to kill another human, and so on.

And the implications of realizing the transhumanists' agenda would change, not only individuals, but also, our societies and their institutions. For instance, it seems likely that the average human lifespan will be extended to 150 years. Human society has always basically consisted of three generations: the young, who need to be cared for; the old, who have retired; and the middle-aged, who are the generation in charge.
Life-prolongation will open up the possibility of having three "middle generations" competing to be in charge. We have no experience of such a system. And what if we were immortal and didn't move on so those coming after us could have their chance? What role does death play in our individual and collective lives and what might we be and do without it?

As the director of the Future of Humanity Institute and a professor of philosophy at Oxford University, Nick Bostrom is a leading advocate of transhumanism who, as a young man, was heavily influenced by the works of Friedrich Nietzsche (from whom the phrase “God is dead” derives) and Goethe, the author of Faust. Nietzsche was the originator of the übermensch or “Overman” that Adolf Hitler dreamed of engineering, and the “entity” that man—who is nothing more than a rope “tied between beast and Overman, a rope over an abyss”—according to Nietzsche, will eventually evolve into.

Like the ancient Watchers before him (Watchers, remember, were fallen angels that mingled human DNA with animals and their seed to produce Nephilim), Bostrom envisions giving life to Nietzsche's Overman (posthumans) by remanufacturing men with animals, plants, and other synthetic life-forms through the use of modern sciences including recombinant DNA technology, germ-line engineering, and transgenics (in which the genetic structure of one species is altered by the transfer of genes from another). Given that molecular biologists classify the functions of genes within native species yet remain unsure in most cases how a gene’s coding might react from one species to another, one should expect the genetic structure of the modified animal/humans to be changed in physical appearance, sensory modalities, disease propensity, personality, behavior traits, and more as a result of these modifications.

Despite these unknowns, such genetic tinkering as depicted in the movie Splice is already taking place in thousands of research laboratories around the world, including the United States, Britain, and Australia, where animal eggs are being used to create hybrid human embryos from which stem-cell lines can be produced for medical research. Not counting synthetic biology, where entirely new forms of life are being brewed, there is no limit to the number of human-animal concoctions currently under development within openly contracted as well as top-secret science facilities.

A team at Newcastle and Durham universities in the United Kingdom illustrated this when they announced plans to create “hybrid rabbit and human embryos, as well as other ‘chimera’ embryos mixing human and cow genes.” The same researchers more alarmingly have already managed to reanimate tissue “from dead human cells in another breakthrough which was heralded as a way of overcoming ethical dilemmas over using living embryos for medical research.”

In the United States, similar studies led Irv Weissman, director of Stanford University’s Institute of Cancer/Stem Cell Biology and Medicine in California, to create mice with partly human brains, causing some ethicists to raise the issue of “humanized animals” in the future that could become “self aware” as a result of genetic modification. Even former president of the United States, George W. Bush, in his January 31, 2006, State of the Union address, called for legislation to “prohibit…creating human-animal hybrids, and buying, selling, or patenting human embryos.” His words mostly fell on deaf ears, and now “the chimera, or combination of species, is a subject of serious discussion in certain scientific circles,” writes senior counsel for the Alliance Defense Fund, Joseph Infranco.
“We are well beyond the science fiction of H. G. Wells’ tormented hybrids in the Island of Doctor Moreau; we are in a time where scientists are seriously contemplating the creation of human-animal hybrids.”

When describing the benefits of man-with-beast combinations in his online thesis, “Transhumanist Values,” Bostrom cites how animals have “sonar, magnetic orientation, or sensors for electricity and vibration,” among other extrahuman abilities. He goes on to include how the range of sensory modalities for transhumans would not be limited to those among animals, and that there is “no fundamental block to adding, say, a capacity to see infrared radiation or to perceive radio signals and perhaps to add some kind of telepathic sense by augmenting our brains,” a position verified by the U.S. National Science Foundation and Department of Commerce in the report, Converging Technologies for Improving Human Performance.

Bostrom and the U.S. government are correct in that the animal kingdom has levels of perception beyond human. Some animals can “sense” earthquakes and “smell” tumors. Others, like dogs, can hear sounds as high as 40,000 Hz—and dolphins can hear even higher. It is also known that at least some animals see wavelengths beyond normal human capacity. This is where things start getting interesting, perhaps even supernatural, as Bostrom may understand and anticipate. According to the biblical story of Balaam’s donkey, certain animals see into the spirit world. Contemporary and secular studies likewise indicate animals may at times be reacting to intelligence beyond normal human perception. Will this have peculiar consequences for enhanced humans with animal DNA?

It is known that opening supernatural gateways that exist within the mind can be achieved through altered mental states induced by psychoactive drugs such as dmt and absinthe. Do transhumanists and/or military scientists imagine a more stable pathway or connection with the beyond—the ability to see into other dimensions or the spirit world—as a result of brain enhancement through integrating men with beasts? Do they envision reopening the portions of the mind that some scholars believe were closed off following the fall of man?

Late philosopher and scientist Terrance McKenna, originator of “Novelty Theory,” speculated that brain enhancement following Technological Singularity might accomplish this very thing—contact with other-dimensional beings. More recently, at Arizona State University (asu), where the Templeton Foundation has been funding a long series of pro-transhumanist lectures titled “Facing the Challenges of Transhumanism: Religion, Science, Technology,”[30] some of the instructors agree that radical alteration of Homo sapiens could open a door to unseen intelligence. Consequently, in 2009, asu launched another study, this time to explore discovery of—and communication with—“entities.” Called the Sophia project (after the Greek goddess), the express purpose of this university study is to verify communication “with deceased people, spirit guides, angels, otherworldly entities/extra-terrestrials, and/or a Universal Intelligence/God.”

Imagine what this could mean if government laboratories with unlimited budgets working beyond congressional review were to decode the gene functions that lead animals to have preternatural capabilities of sense, smell, and sight, and then blended them with Homo sapiens. Among other things, something that perhaps DARPA (Defense Advanced Research Projects Agency) has envisioned for years could be created for use against entire populations—genetically engineered “Nephilim agents” that appear to be human but that hypothetically see and even interact with invisible forces. Overnight, the rules for spiritual warfare as well as regular warfare would take on an unprecedented (at least in modern times) dimension.
4. THE BIBLICAL PERSPECTIVE ON TRANSHUMANISM

When the Lord Jesus was describing the “end of days,” the time just prior to His Second Coming, He drew a direct connection back to the days of Noah: the time just before the Great Flood. He mentioned that the people were involved with eating, drinking and marrying right up until the flood came. They were totally unaware of the coming judgment.

At first glance, there does not seem to be anything unusual about eating and drinking until all the Scriptures are studied about the time of Noah. The big picture shows this time period was full of violence and rebellion against God. It is also a time of intense sexual immorality as women were having sexual relations with spiritual beings identified as the “sons of God.”

This combination of violence and immorality grieved the heart of God. The wickedness of man filled the earth. Man’s thoughts and imaginations were continually evil, and this triggered God’s judgment on mankind. Mankind was so corrupted that God deemed it necessary to destroy man and start over again with Noah and his family.

Genesis 6:5-7 And God saw that the wickedness of man was great in the earth, and that every imagination of the thoughts of his heart was only evil continually. And it repented the LORD that he had made man on the earth, and it grieved him at his heart. And the LORD said, I will destroy man whom I have created from the face of the earth …

The effect of man’s sexual immorality was staggering since it altered the race. The offspring of this union between human females and the fallen angelic beings were physical giants. These children were not fully human. They grew enormous in stature with great intellects and were called “men of renown.”

This cohabitation between humans and the spiritual beings was not isolated to a few individuals but became widespread throughout the earth.

Genesis 6:1,2,4 And it came to pass, when men began to multiply on the face of the earth, and daughters were born unto them, That the sons of God saw the daughters of men that they were fair; and they took them wives of all which they chose. There were giants in the earth in those days; and also after that, when the sons of God came in unto the daughters of men, and they bare children to them, the same became mighty men which were of old, men of renown.

This cohabitation was part of the reason God’s heart was grieved with mankind and triggered the flood as judgment to wipe out this corrupted race of humans. In modern science, the biologists would identify what happened to mankind as altering the human DNA. The DNA of man was changed by this union and some men were no longer fully men. They were a hybrid.

The Bible describes God’s selection of Noah in order to preserve mankind. Noah qualified because he was “perfect” in his generation. This does not mean he was a morally perfect human, but that he was genetically perfect in his lineage. He had perfect human DNA and was not corrupted by the sons of God.

Genesis 6:9 These are the generations of Noah: Noah was a just man and perfect in his generations, and Noah walked with God.

Who would have thought that a time would come when mankind’s DNA would once again be altered. The modern altering would not be done through sexual contact with the sons of God, but rather through man’s knowledge of science and breaking the DNA code. We are now living in a time when man’s DNA is being tampered with just as it was in Noah’s day.

Man’s increase in scientific knowledge reached a point that starting in 1990 a concerted effort was made to map the human genome. The United States led this project with assistance from other nations. This was an enormous task as the genome has 25,000 genes with 3.1 billion DNA pairs. The project was 99 percent finished in 2003.

PARATECHNOLOGY
Immediately while this mapping was taking place, the manipulation of the DNA began. This manipulation included splicing DNA together from two females to create a multiple parent egg, and splicing human DNA into other animals such as mice and pigs. Animals such as sheep were cloned, but to this day there is no known case of a human being cloned. Since 2003 there has been a tremendous acceleration in tampering with man's DNA. It seems that scientists are now on a regular basis making discoveries about DNA.

Never before in history did man have the knowledge to break the genetic code. Man now has such knowledge and is developing the technology to alter his DNA. This is once again setting the stage for corrupting the human race. We are now living in "As the days of Noah were"!

The scientists tamper with man’s DNA under the guise of increasing health by identifying genetic diseases and imperfections. By using this argument, the scientists are virtually insulated from criticism and control. They have a free hand to tamper with the human DNA as long as it is tied to health. With this freedom, the geneticists will move to create babies free of any genetic flaw. By 2006, this is exactly what happened.

In 2006 Great Britain opened what is called “Designer Baby Clinics.” In these clinics, an eight day old embryo was examined for over 200 inherited diseases. A “defective embryo” was destroyed while the accepted one was used for invitro fertilization.

The following is a quote from an article about the use of two female monkey eggs to produce an offspring. With this type of argument it is impossible to stop the manipulation of man's DNA:

“The prospect of a human baby with three biological parents has moved closer after scientists created monkeys using a technique that one day could stop children from inheriting severe genetic disease …

It should allow scientists to replace faulty “cellular batteries” called mitochondria, which affect about 1 in 6,500 births. While most mitochondria defects have mild effects, some can trigger severe brain, heart, muscle and liver conditions, as well as cancer, diabetes, blindness and deafness.”

In addition to a baby free from “genetic flaws,” parents now can create a child to order. It is possible to go shopping for the genetic type baby you want. For example, a child could be created from an egg and sperm of two Olympic athletes and placed in the womb of the future mother. The child would have DNA that was not related in any way to its birth parents. A female Olympian's eggs cost around $30,000.
The natural progression is to enhance the human race by sharpening the senses. If the DNA is now understood and can be manipulated, why not increase the eyesight and hearing? With the addition of eagle DNA man could see like an eagle. By placing deer DNA, man could hear like a deer. The same enhancement could be accomplished for smell. For strength the introduction of gorilla DNA could give super strength, and for speed how about ostrich DNA!

The scientists have already placed human DNA in animals such as mice and pigs; however, there is no report of animal DNA yet being placed in humans. When the science of DNA tampering is perfected, there will be a cry to enhance humans with animal DNA.

Evolution also plays into the tampering of human DNA. The theory of evolution frees man from Genesis 1 which states that everything is to reproduce after its kind. Evolution also detaches man from his Creator and being created in God’s image and likeness. Man is now a free agent to tamper with his DNA under the guise of advancing evolution.

The evolutionists believe they are rapidly advancing evolution by manipulating the DNA. Many scientists believe they are enhancing evolution by improving man. Because, through evolution, man has no fear of God and thus no restraints on tampering with DNA, any attempts to stop this tampering will be met with cries from the scientists. Unless there is a general public outcry, this tampering will continue until man's DNA is altered and merged with animals. The following is a quote from an article “We are becoming a new species, we are becoming Homo Evolutis” which states:

“… humanity is on the verge of becoming a new and utterly unique species, which he dubs Homo Evolutis. What makes this species so unique is that it "takes direct and deliberate control over the evolution of the species." Calling it the "ultimate reboot," he points to the conflux of DNA manipulation and therapy, tissue generation, and robotics as making this great leap possible...”

The day may come when we are able to take the best biology of the known animal kingdom and make it part of our own. This isn't just about being a bit stronger, or having perfect eyesight our whole lives. All of our organs and limbs have weaknesses that can be addressed, and there are also opportunities to go beyond basic fixes and perform more elaborate enhancements.

The merging of human DNA with animals creates what is called a Chimera. The word chimera comes from Greek mythology. This was a frightening looking beast that was made from the parts of several animals. It has a lion’s head, goat body, and dragon’s tail with other creatures mixed in. It was always viewed as a monster. Webster’s dictionary defines a chimera as the following:

3: an individual, organ, or part consisting of tissues of diverse genetic constitution occurring especially in plants and most frequently at a graft union, the tissues from both stock and cion retaining their distinctness in the chimera

There was even a movie made about human chimeras. It was made in 1977 and called The Island of Dr. Morea starring Burt Lancaster. In the picture, Dr. Morea, a mad scientist, creates numerous chimeras and abuses them.
Eventually, the chimeras revolt and kill him. This movie was made long before genetic manipulation was possible, yet the idea was there. In the near future, chimeras will be reality and not science fiction.

When reading Greek mythology, one did not give thought to the possibility that one day man could create a Centaur and Minotaur. These were creatures that were half human and half beast. The Centaur had the upper torso of a human and the body of a horse. The Minotaur had the head of a bull and the body of a human.

These beasts were always viewed as pure mythology, but what about today when it is becoming possible to create such beasts! What was viewed as ancient mythology, in the near future, could become reality or at least the possible ability to create such a beast!

The ancient Greeks believed in the Titans which were gods that ruled the earth. They were physical giants and produced offspring with human women. This is very similar to the biblical account found in Genesis 6. Perhaps the Greek myths had some kernel of truth that was twisted away from the Bible into what is now known as mythology.

It is a known view, that once the human DNA is contaminated with animal DNA, this beast is no longer human and no longer created in God’s image. This is what happened in Noah’s day, and God selected Noah because he was pure in his generations. He was fully human.

The creation of a chimera is in direct violation of the Bible. In Genesis, chapter one, the Bible states eight times that everything is to reproduce after its kind. This is a basic law of life that God instituted at the very beginning.

Genesis 1:24 And God said, Let the earth bring forth the living creature after his kind, cattle, and creeping thing, and beast of the earth after his kind: and it was so.

The mixing of DNA from two different species violates this law. When God created man, He stated that man was made in His image and likeness. The human DNA is what physically carries this image and likeness. The addition of animal DNA means that man is no longer in God’s image. It is extremely serious to tamper with the integrity of man as transmitted through his DNA. This is, in part, what triggered the flood in Noah’s day. All of the hybrid humans were destroyed during the flood, and God then started over with Noah.

Genesis 1:26, 27 And God said, Let us make man in our image, after our likeness … So God created man in his own image, in the image of God created he him; male and female created he them.

When God moved to redeem mankind through the Lord Jesus, the Bible specially states that He rejected the nature of the angels, but took on Him the seed of Abraham. The Greek word for seed is very interesting; it is sperma, which is the basis for the English word sperm. Sperm is what carries the male DNA.

The Lord Jesus had a human body which had pure DNA that could be traced back to Abraham, then to Noah and finally to Adam. His DNA was 100 percent human, and thus when He shed His blood on the cross for sin, He could redeem mankind!

Hebrews 2:14,16 Forasmuch then as the children are partakers of flesh and blood, he also himself likewise took part of the same; that through death he might destroy him that had the power of death, that is, the devil ..
For verily he took not on him the nature of angels; but he took on him the seed of Abraham.

Mankind is racing towards altering his nature. Paralleling tampering with DNA is the merging of man with robotic technology. The merging of man with machines is called Singularity. Both Singularity and DNA tampering are on the threshold of altering what it means to be human. This is coming so fast, yet so few outside of the scientific circles are aware of this.

God is fully aware of what is happening. He will only let the tampering with man’s DNA go so far, and then He will step in to stop it. It is clear that modern man, led by the geneticists, is right at the very point when God will intervene to stop this madness.

2 Peter 2:5,9 And spared not the old world, but saved Noah the eighth person, a preacher of righteousness, bringing in the flood upon the world of the ungodly … The Lord knoweth how to deliver the godly out of temptations, and to reserve the unjust unto the day of judgment to be punished

Once again, tampering with mankind’s DNA integrity is a very serious offense to God and will bring severe judgment. Man is once again in the same position as the Days of Noah. Through science, it is now possible to alter the nature of man. The judgment that happened in Noah’s day is a warning of what is fast coming upon the earth. Science has taken mankind beyond the point of no return to a genetic Armageddon.

Because modern science is anchored in evolution, no amount of reasoning can stop this progression. The evolutionists have no respect for the Bible and absolutely no fear of God. The evolutionists mock at the concept that man is created in God’s image, and therefore have no compunction about altering the nature of man. Just as God stopped it in the days of Noah, so God is going to stop it in our day at the glorious Second Coming of the Lord Jesus. Make sure that in the days of Christ’s Second Coming, you are on God’s side.
5. THE MANCHURIAN CANDIDATE

Dr. Nick Begich is the eldest son of the late United States Congressman from Alaska, Nick Begich Sr., and political activist Pegge Begich. He is well known in Alaska for his own political activities. He was twice elected President of both the Alaska Federation of Teachers and the Anchorage Council of Education. He has been pursuing independent research in the sciences and politics for most of his adult life. Begich received Doctor of Medicine (Medicina Alternitiva), honoris causa, for independent work in health and political science, from The Open International University for Complementary Medicines, Colombo, Sri Lanka, in November 1994. He coauthored Angels Don't Play This HAARP: Advances in Tesla Technology.

Begich also authored Earth Rising - The Revolution: Toward a Thousand Years of Peace and Earth Rising II- The Betrayal of Science, Society and the Soul. Begich has published articles in science, politics and education and is a well known lecturer, having presented throughout the United States and in nineteen countries. He has been featured as a guest on thousands of radio broadcasts reporting on his research activities including new technologies, health and earth science related issues. He has also appeared on dozens of television documentaries and other programs throughout the world. Begich has served as an expert witness and speaker before the European Parliament, GLOBE, and for many other organizations.

In the interview below which took place in 2005 he talks about the very real possibility of a Manchurian Candidate.

Interviewer: We, once again, had the opportunity to catch up with Nick Begich for an update on some of the technologies on the horizon. In this interview Nick speaks further about the Verichip and what that means to our lives. He also shares information regarding Quantum Computing, a reality that he says is just around the corner. These two technologies not only will make us easy marks for influencing our consumer choices, but also have a much more insidious potential.

Interviewer: I think it is very appropriate to keep up the conversation about cell phones and really take it even deeper because it is becoming a big issue. I think all of us personally know multiple people now who have died of brain tumors.

Nick Begich: Right. In fact, this is an ongoing controversy. You know it started, if you remember, with the very first reports of brain tumors. It came out of Florida; Congress got involved; they got very excited; they got Motorola and the industry to actually fund a study that was over 25 million dollars, five years. They hired Dr. George Carlo, actually, to conduct that study. And the odd thing was—you normally think about scientific studies being hooked up to an engineering team or a scientific team—in this case they were connected to the chief lobbyist for the industry in Washington D.C.

Interviewer: That's nice.

Nick Begich: Because it really wasn't about science, it was about politics. So, what the industry did is he spend five years, hired the best people in the world, put together his report. Motorola and others came out with that report saying see, everything is safe; everything is wonderful. And, Dr. Carlo, who is one of my heroes, had the integrity to stand up and say, “No, that is not what I said.” And then he published a book called, Cell Phones: The Invisible Hazards. It actually lays out the framework for not just tumor formation, but the breakdown of the blood/brain barrier. He put together a very good model that would explain what we are seeing in the research regarding the wireless world, particularly cell phones. What
we are going to see is something that goes far beyond what we saw in the Tobacco Industry in terms of potential litigation in the future, particularly Third-Party Litigation. This is where employers, as a condition of employment, require their employees to use these phones consistently and constantly during the day. Eventually that’s going to probably breed some of the biggest Worker’s Compensation cases, Third-Party Litigation because of the health effects that are being widely reported today.

Interviewer: This begs the question—there are technologies out there, and you have basically put your stamp of approval on a couple of them—that start knocking out some of those frequencies that certainly lessen the impact of cell phones. Why would these companies not start investing hugely in these technologies?

Nick Begich: This is a great question because it has been asked before, and actually right after Carlo came out with his report at the last count we found 12 U.S. Patents where the industry had, in fact, redesigned circuitry to be safer. Although, they still maintain their perfectly safe. The thing is if you acknowledge there has been a safety issue, then you open the door immediately to the liability of everything that has happened before. And, this is something that we, as a public, should get involved in, because we need to provide a framework where industry, when the research comes out, that they can come forward and acknowledge it. And, as long as they are acknowledging the research, we should limit their liability because they didn’t do it, unless it is in bad faith. Like what we saw with the Tobacco Industry where the science started to emerge and they suppressed that science. Now, in that case, I say bankrupt the industry if they hide that science. But, if they are open, and they are open and they are honest and they make those corrective moves, there are lots that we can do. But, it requires a different kind of regulatory environment that encourages industry to be honest, to be upfront, and to take advantage of the kinds of principles applied in Europe—the Precautionary Principle, where when the information first starts to arise we alert the public, we take the appropriate actions, and if we are wrong there is nothing lost in that; but, if we are right there is everything gained by that. In the 30 years plus that the Europeans have applied this principle in health and environmental issues, they have never once—never once been wrong.

Interviewer: Let’s talk a little bit about the Scandinavian Cell Study just to get a little more depth to the physical aspects.

Nick Begich: This is interesting. Nokia was really a leader in the first, and they are a Finnish company; everybody thinks they are a Japanese firm because of the way it sounds, but it is Finnish company. So, the Scandinavians have the longest historical use. And you want to look at a population that has a reasonable number in the population across socioeconomic boundaries, rural, urban and for enough time. So, there they had at least five or six years of pretty intense cell phone use when this study was done. When this study was done it involved 15,000 people, which statistically is a very fine model; in fact, a very good model. And, in that they found that people that use the phones for over an hour a day, which is pretty routine these days, had a number of symptoms. The things they that were widely reported were heating behind the ears, first, short-term memory loss, appetite changes, sleep pattern disruptions, sex drive disruptions. Those were the widest reported kind of consequences. What they found in the study is it tended to be cumulative—the more you used it, the more susceptible to this you become, the more weakened your system becomes. There have been other studies more recently, in fact there is a study ongoing right now that is scheduled to end in 25 years, which will be a little late.

Interviewer: Yeah, a little late!

Nick Begich: Because by then this technology will have been replaced by who-knows-what in 25 years. I mean that’s almost like going back to the Telegraph. I mean it just doesn’t work. But this is how they design these in the U.S., and when you look at the things that are coming out more recently—in the last month we had the German Environmental Health Ministry came out and was giving warnings on WiFi,
saying that they are not going into public schools because of the risks associate with them; they have given the warning to the public that these have potential risks, again, under the Precautionary Principle, which has never been wrong. Germans are not some slouch country. I mean they are very sophisticated.

Interviewer: They are not sloppy in research.

Nick Begich: And very thorough and precise in their research. When the Germans say there is a problem, we better all be paying attention. The Swiss actually acknowledge this problem. Swiss Reinsurance, one of the biggest insurance groups in the world in terms of making recommendations to the Insurance Industry so they avoid troubled waters, wrote a publication that is available on the Internet called, Electro smog. Electro smog is a concept, and what they said is don't underwrite the risks of radiation or electromagnetic field effects; don't underwrite those risks because they believe it would bankrupt the Insurance Industry globally.

Interviewer: So, in plain English for anybody listening that means they find them simply too dangerous to underwrite because it is going to be absolute that there is going to be one law suit after another.

Nick Begich: They are convinced of it, and even Lloyds of London, which will insure anything, won’t insure cell phone radiation risk. That should tell us something. If they won’t take the financial risk, why should we take the health risk? We need to look at the ways to utilize cell phones in a more sensible way, because we can. I mean they are not going away. But, the wireless component is something that is going to become increasingly intrusive. I think about my home environment. Within my home environment I have six wireless networks and none of them are mine. But they all intrude upon my property and upon my airspace and upon my home. Do I have a right to sue my neighbors for inflicting that on me? When the science is in I will, because it is an intrusion on my personal space and my life. When you think about Cell Phone Towers, and there has been research on this in Europe, within 1,500 meters of Cell Phone Towers they noted distinct changes in the genetic character of [developing] embryos. Now, this was done with animal species, but genetics are genetics. What we are talking about here is manipulating genetic material in a way that causes deformation. Now, when you start to think about cell phones, and cell phone use, it is not just the system you put on your head, it is the entire system of broadcasting that we need to be concerned with. Then that extends into the wireless world, and it also extends into the home portable phones, which people generally don’t even think about when they think about cell phone safety. But the portable phones tend to be even more poorly 3 designed and more poorly engineered so they end up using energy much more inefficiently, which means that the energy is transiting somewhere, and a lot of it is transiting directly into your head. The other thing that is important is with children. With an adult when you put it up to your head you have a skull thickness and you have tissue that offers some resistance to the signal transfer. With a five-year-old 400% more
energy transfers into the brain because of skull thickness than an adult. With a ten-year-old 200% percent more energy transits into the brain than an adult. So, when you think about cell phones being marketed to children, it is not done in Europe in most of the European countries. They don't put Mickey Mouse characters on cell phones.

Interviewer: Right!

Nick Begich: In fact, in Great Britain every year in August they warn families if your kids are under 16, try and avoid cell phones, before they go back to school. So, these aren’t going away, and at the same time there is gaining recognition that there is a problem here. Hopefully the regulatory bodies, at some point, will begin to address it.

Interviewer: To what degrees are those in the industry kind of preemptively beginning to modernize the technology to where it is less dangerous?

Nick Begich: There are several things that have happened. Again, it is a question of how much intensity? Just being here in this space we are being bombarded by electromagnetic fields that are affecting us—less so than placing something next to the head. When you place it next to the head, because of the way energy transfers, it spreads out; the density of that energy spreads out very rapidly with distance. So, if you can get it just a little ways away you dramatically...

Interviewer: Put it on speaker phone.

Nick Begich: Exactly! So many of them now have the speaker phone feature. We already hear half of the conversation; what do you care if we hear the other half? In fact, it makes it more interesting for the rest of us.

Interviewer: Right.

Nick Begich: So, you hold the phone a little bit further away; it makes a huge difference. Don’t put it next to your body where there is soft tissue and you get deeper penetration—you affect Kidneys, Liver, and so on. Get the phone away from you if you are carrying a purse, put it in the purse. If you are male try and figure out a way to not get it next to your body.

Interviewer: Carry a Man-bag.

Nick Begich: Carry a Man-bag, there you go!

Interviewer: So, we’re looking at some of the problems, and you were talking earlier about just the heating behind the ear. That sounds rather innocuous in and of itself, but it is not. It is the heating that is actually at issue, isn’t it?

Nick Begich: The heating what it does is breaks down the blood/brain barrier, because that heating also transfers into the brain. In fact, when you are using a cell phone—and I’ve seen the images where they actually show the heating. What happens is that heating moves through the skull into the brain, breaks down the blood/brain barrier and also slows the repair of DNA. This normal, natural repair process is slowed down. This is the mechanism that Carlo theoretically believes that this is the mechanism that is the trigger for tumor formation, which actually does make good sense.

Interviewer: Yeah.
Nick Begich: It also makes sense why it would confuse things like appetite, sleep rhythms and so on, because you are transferring toxins into the brain. Short-term memory loss gets explained; I mean a lot of this starts to make a lot more sense. The other interesting thing is when your friends start dying of tumors; look at which side they held their phone on. We traditionally hold the phone on one side or the other, and that is 4 where they show up. And, you are going to see the busiest people in the world—the Johnny Cochran’s of the world, who are busy and on that phone 6 or 8 hours a day—those are going to be the first fallen in this thing. It is going to be the people that actually we probably really need for their intellectual capacity because they tend to be the busiest people in the world. And, we really need to think about how we use our technology, and how better to utilize it so we can avoid some of the downfalls of these two-edged swords.

Interviewer: Looking at cell phone technology in terms of some of the more nefarious uses of it, yesterday I heard you talking about the Roving Wire Tap.

Nick Begich: Roving Wire Taps: There was a test case that actually went to the Supreme Court, and it was a case in New York, where they had taped conversations of Mafioso, and used it in prosecuting them, and they wanted that evidence thrown out. Because, the way the Roving Wire Taps works is, for instance, if you wanted to tap a conversation in a restaurant, you could literally go in from a distance, activate all of the cell phones within that restaurant by downloading just a bit of software to them remotely, activate them, and they act as a microphone in the room.

Interviewer: Even if they are turned off?

Nick Begich: Even if they are turned off. And they can pick up all of the conversations within a given space. So, even if these guys are smart enough to remove the battery, it’s the guy next to him at the table one over that has the phone laying on the table or sitting in their jacket. The idea is with a Roving Wire Tap when they first came out people thought well, what does that mean? They just kind of go through a neighborhood and randomly check phone lines? It was kind of confusing. And, then this lawsuit came out, and actually they won. The Mafia didn’t get the evidence thrown out; they went to jail because the evidence stayed in.

Interviewer: And no warrant of course, for any of this, or was there for this case.

Nick Begich: Well it was a warrant for the wire tap, but it was just an unusual mechanism for utilizing it. We always think of a bug, and you can go in and do a bug sweep. But, when you are doing a bug sweep and you are looking at the frequency bands and you see that your cell phone band width assigned by the Department of Commerce. You look at it and you go well, those are just cell phones, so you ignore it.

Interviewer: Yeah.

Nick Begich: And, the microphones are still there. You have heard about it with On Star on your car. That is another example of this. The voice you call—you call them up—well, how do you know they didn’t turn it off? Who do you know has activating that system? Do you really want every move you make tracked? I, personally, find that offensive.

Interviewer: Yeah!

Nick Begich: The whole idea of the convenience in trading for your safety and security—and this is always the content of the argument: Don’t you want to be safe? Don’t you want to be secure? They use fear to motivate you to accept a lowering, and lowering of your standards of what is acceptable in a civil society. These are just small examples of it. But, I think a lot of it has to do with the general convenience
of the device people will let that other stuff go, because all of us know it is built in now. Most of us just don't think about it.

Interviewer: Yeah. Well, not only that there is the conversion over from land lines. As you were also stating yesterday, some 20% of people don't bother with land lines anymore. So, some conversion had to be made if you were going to continue to be intrusive.

Nick Begich: Right. Land lines are interesting because the dropping of land lines, generally, and going to the cell phone offers a lot of things from a marketing and from a political prospective because now you have a unique identifier that is connect to a unique individual. I mean Radio Shack, in our community, won’t charge up phones unless you do it on a card. They won’t take cash, and they won’t take checks, because they also want to know who charged that phone up, who is paying for the phone use. 5

Interviewer: Interesting.

Nick Begich: Which is an interesting thing because, again, why isn't U.S. currency good at a Radio Shack for cell phone minutes?

Interviewer: No kidding! Talk about more insidious data mining.

Nick Begich: Exactly, and so you start to look at it, and you say ok, 20% of the population—as children grow up they are not going to get land lines; they are going to look at it like my son when I tried to explain what a typewriter was, and I said, “It is a computer keyboard without a screen.” and he said, “That'll never work!” you know. And, land lines are going the same way in relationship to cell phones. When you think about the cell phone, it identifies you when you travel around because it has built in features. Every time you make a call where you were is also recorded, not just where you were and who called and what time it was, but where you physically were is stored, because it is triangulated between the Cell Phone Towers.

So, your movements are traced, as well. And, when you start to think about this—one of the things that is forecasted because the cell phone is unique enough to you so that as data mining occurs, where lots of information is collated about individuals, and then you walk by the electronic billboard down the street, and the billboard recognizes you, personally, because of that cell phone, and then based upon your entire profile starts pitching advertising messages that you are most likely to respond to.

Interviewer: How far away is that?

Nick Begich: We are very close; I’d say within the next three to five years you are going to see some of this technology commercially applied.

Interviewer: You are going to be more stimulated as you walk through life because you are going to be pitched with exactly what your desires [are], right?

Nick Begich: Right Now, the other part of this is from a political perspective when you think about tailored messages based on data mining, what is really important about this is you could have a political candidate that has ten major issues; nine of them you are 100% against; one of them you are 100% for. He is going to isolate which of those issues you are in favor of, and those are the only messages you are ever going to get from that candidate, directly, either by mail or by the push polls, or whatever
mechanisms. So that they can manipulate you into believing that this person resonates with your same belief system, when 90% of their agenda is something you would fight vigorously against. That is the manipulation that occurs with data mining, whether it is for political purposes; the same thing can be used commercially when you isolate where a person’s general pattern of existence is. And, you can narrow it down when you start to look at larger, and larger populations you can draw some very important analysis from that from a marketing perspective. That’s why Google is becoming so important, because they are collecting all of that data, which is allowing for a honing of marketing—the idea of all of the interconnections, and how a person views the world can be deduced from these kinds of engines. All that data is stored because it's the data that is valuable. Even though we may not have the capacity, today, to sort all that data, that’s coming and it is coming extremely rapidly. Storing it is relatively easy, and because it is so cheap to store vast amounts of data, virtually all data is stored on line.

Interviewer: Processing it is becoming, also, another game that is increasing very rapidly.

Nick Begich: Oh yes. This is very important because it is the quantum computing area.

Interviewer: Yes.

Nick Begich: We have talked about that in the past. Quantum computing and I’ll use this analogy because it is a good one, and it was in an article discussing the Super Computer that had just broke the record in 2006 for speed, and it was 280 teraflops, which doesn’t mean anything to most people in the world. But, it is the equivalent of 6.6 billion people with a hand calculator, each of them every five seconds doing a calculation for 60 hours, and all those 6.6 billion calculators, every five seconds for 60 hours equal what a Supercomputer today does in one second!

Interviewer: That’s amazing! 6

Nick Begich: Now, that’s an amazing thing, when you think about it. But, a neuron-firing chain in the Human brain requires a three-dimensional MRI that requires three Super Computers tied together just to get one Neuron firing in the brain. Now, wrapping your head around that for a minute, and then think about that Super Computer of today running for a trillion years, ok. I just told you what it does in a second; in a trillion years of operating a Quantum Computer in one hour will do what a trillion years of today’s Super Computer will do. Now, quantum computing is the idea on an atomic level, on a very small level. The thing about it is on that level the operator influences the outcome. You know this idea in physics, the observer influences whether it is a particle or a wave. Well, this is a problem in quantum computing that was resolved earlier this year, because they figured out a way to electromagnetically shield a Quantum Computer so you could develop this technology. So, from this point forward we are going to see accelerated advances. And the other thing that we have seen in speeds are things like Optical Microcircuits that work on light rather than electrons, which is a much, much faster medium. But, when you start to think about Light Circuits that’s another major area that will probably be a step in between the quantum computing step, but these things are coming. Superconductivity feeds into this, as well, because when you reduce the resistance down to zero, then you have these incredible speeds of transmitting information and computing that information. So, it is sort of this coalescing of technologies taking place right now. Quantum computing is going to be here in the next couple of years, and the day it arrives—whoever gets there first—every security system in the world is then vulnerable to hacking. You know with enough persistence you hack through them all?

Interviewer: Right.

Nick Begich: Well, imagine that Super Computer of tomorrow, that Quantum Computer being able to hack through. Now, the interesting thing is every human brain is a Quantum Computer. We already have
that capacity; we just haven’t figured out how to fully access it. And, it is kind of like Man always trying to replicate what the Creator has already done. We always do it with a big hammer, and we only need a feather, and we don’t quite figure that out.

Interviewer: Right!

Nick Begich: But, nonetheless, the human brain is capable of doing much more than we think, and that is where I believe that the real action will come. Because as these other technologies emerge on one side materially, the human consciousness also changes materially.

Interviewer: It is interesting because the Quantum Computer you are talking about and its capabilities, they were written about by Michio Kaku in his book, Visions, about ten years ago. But, it seems to me we are way ahead of schedule. Because, I think he had projected that for something like 2050, when this would become a useful reality.

Nick Begich: Sure. You know that's not unusual to see those predictions far into the future. There was one on Space cast 2020 making predictions about being able to send voice information into someone’s head, and actually that was done at MIT; the Lemelson was awarded to Woody Norris, who did that in 2005, 15 years ahead of schedule.

Interviewer: Right.

Nick Begich: These schedules are really irrelevant, because [this is] what happens as computing power increases: Back in the 1980’s we were doubling our knowledge base from the invention of the wheel to where we are today about every five years; back at the beginning of this Century, around 2000 it was about every nine to ten months; now it is about every seven to six months, and getting shorter, and shorter, and shorter. We will double the knowledge of human beings almost every day with quantum computing. At that rate there is not way to analyze the implications of any of those changes; we will just be in this rush. And, the thing about quantum computing is the machines will be incredible. They will almost be miraculous, because of their predictive capacity—to predict future event based upon huge bodies of input. 7 We will begin to rely on them significantly in making decisions. The problem with quantum computing is it will never absolutely be perfect. So, you get a butterfly effect in the programming that over time they become less and less reliable.

Interviewer: When we have this capacity already, innately!

Nick Begich: Absolutely. And this is where the parallel is in my view—as we learn more about the brain, as we learn more about the mind, and we begin to open up our own potentials we are going to look back on this period 100 years from now and be laughing about what we were doing, in the same way that we look back 100 years ago at the thoughts and science then. It is not going to be any different. I think the biggest concern is from my perspective is you look at the mind and you look at the brain and what's emerging in the whole area of Neuroscience, the biggest challenges for civil liberties are at stake. Because the domain of the mind is the connection to whatever you believe the Soul to be connected to, whatever you believe. It is our control station for this [the body], and our link to what else is out there. And, the fact that anyone believes that they should be able to manipulate activity within our brains for any other purpose—PBS just did a piece called the 22nd Century, and their opening segment was, “The Worldwide Mind,” where they believe, like we had the Internet of the 1990’s, that we will have a network where every human brain on the planet will be connected. Now, I don’t like that because, first of all, artificially doing this means that the manipulation of all of those human brains is also possible. Being able to project propaganda into those brains is also possible in lots of different ways. PBS is suggesting that this is where it is headed. In my view we already have this capacity; we are already connected in this way; we just don’t recognize that connection. The science is beginning to show this. What we don’t
need is an artificial that there is an operator on that has the determinative ability to influence the human mind, human behavior. When you think about reliance on electronics, you know, everyone—the generation coming up now—are so different from you and I in terms of how they view the world. It’s the gadgetry. But, when you look at the world across the world, and you look at who is the most powerful on the planet; it is those with the highest capacity to control and command technologies. Within Democratic Republics like ours it means that we have to have at least a working conceptual knowledge. We don’t all have to know how to put the stuff together, but we ought to know what it does; we ought to consider the ethical and moral implications of it and have an opportunity to debate that within the public forum, and make sure that technologies serve Human Kinds interests rather than work against them.

Interviewer: Perfectly put. I wouldn’t say this is off topic, but we might need to find a segway here. Naomi Watts wrote an article recently. I think it was called, “The Tears of Americans,” or something. As she is out speaking she is noticing that people are coming up to her saying My God, what can we do? I’d love to be able to speak up; I’d love to defend what I think is right, but I am so afraid They are Watching Me! Well, now we know it is not plausible to watch every human being. But, on the other hand, the people who are aware of all of this are becoming deeply emotionally depressed over the loss of their autonomy and being able to speak out. Any thoughts on this because, valid or not, it is mass.

Nick Begich: I see it, too, in a lot of my travels. The injection of fear into populations is one of the routes to control the populations; it always has been. Because what happens, if you look at the brain in an EEG, where you are actually measuring brain activity, and you look people experiencing fear, you get incoherent brain patterns; they are all over the map, and they tend to be in the higher Beta ranges and above. They are the kind of signals that don’t allow for intellectual, higher-ordered thinking. What you need is to slow the brain down, to relax. Often what happens with activists, and I see this all the time: They see the issue; they see the goal, but instead of recognizing their immediate spheres of influence, which is where we should start, they stretch beyond it. When they do they are in an unstable position, because they are not able to carry the message forward. We all have a part to play; we all have a different part to play. Work within your spheres of influence; do what you absolutely know that you can accomplish. Do that. Don’t do what you don’t believe in; don’t do what you don’t believe you can achieve, because it will only create fear and anxiety. Do what you can do, and it may be as simple as talking to your neighbor. Once you have done that the next thing will reveal itself, and your level of confidence and your knowledge of following your own truth will allow you to propel yourself forward. Yeah, you’ll have times. I, myself do. I’ve been doing this a long time, where 8 you get overwhelmed. And it is usually the other things in life for me; it is not the work that we are doing, it is just five kids, a big family, a lot of stuff going on.

Interviewer: Life, finances, all of it. (Laughing)

Nick Begich: All the stuff that happens in life. But the thing that we need to remember is it is in the calmness of the center of our Soul, where the good things happen. We can’t do it in an agitated state. Our government wants to blow Red Alerts and Orange Alerts. Forget all of that; recognize that we have one alert, and it is Green. It means go forward in what you know to be right and true, and follow that. At the end of the day the fear will dissipate.

Interviewer: In terms of counter-technology, as it were, that can kind of block and shield, and so forth, is there any technology you know of outside of what we are beginning to re-discover in really ancient technologies that can, in essence, kind of do a smog-bust on these frequencies in your domain?

Nick Begich: It is difficult because the carriers are so different. You would have to develop systems to block each and every potential. Now, the other way to kind of—you look at that side; how to you counter all the signals coming in—and, the other way to look at it is can I create a signal within my Near Field that will be strong enough that my body will lock onto it and ignore the rest? That’s the better approach.

PARATECHNOLOGY
Interviewer: That’s better. Now what so, how do you . . .

Nick Begich: There are some things out there. There are some Electromagnetic Field Generators. I can’t give you a brand name, or anything, but they are out there. They create an electromagnetic pulse in, say, the 7.83 hertz range, which is the Human’s resonance. These things exist. They create an electromagnetic field pulse that the body will couple with; you will lock onto, but it is a pulse rate that correlates to the higher states of consciousness, correlates to the planet, itself, and is a healthful thing. So, what happens is you lock onto that—you are zeroed in on that, and all of these other signals coming in tend to be weak, so you ignore them like background noise in a crowded room. That is exactly how it works. So, strong systems are the better systems. When you look at depressed systems—I’m talking about Human Beings around the country, the level of Depression related to stress, which drives the system down, which weakens the Immune System, which weakens your own signal strength in terms of how you act as a transceiver and transducer of energy. All of that changes when your system is crushed by stress. Stress is really the root of a lot of this. Fear drives stress; a lot of other things do, as well. So, looking for techniques, simple breathing can reduce stress. We’ve demonstrated a lot of things in the past, certain methods of Biofeedback can be used. But just some basic meditation techniques. We’re not talking about in a religious connotation here. I’m just talking about basic techniques for slowing the brain activity down; getting your body back in sync, and providing your body with the right nutrients, which is something else that we don’t do in this country sufficiently.

You need the right building blocks within the body to build a strong system, and then you need to look at stress as one of the things that breaks that system down. Try and find ways to mitigate against the stresses of life. A lot of that happens by taking your own control of your own power, again. See, when you know you need to do something and you don’t do it, your stress level actually increases. If you take a step in the direction of what you know to be right and true, you regain your own control, your own empowerment—you recognize you are creative. If you believe this, and I do—you are created in the image of a Creator. It is not how we look; it is what our capacity is. Don’t insult the creation itself by limiting your own possibilities.
6. GENETICS AND SPLICING

If there was ever a movie which highlighted the grave fears about the way that Genetic engineering is going it is a move released in 2009 called Splice. Centaurs, minotaurs, nymphs, fawns, are all familiar images from Greek mythology, but was it just mythos? Were these so-called fictitious creatures in fact the by product of genetic engineering from the Sumerian era which then became the basis of myths handed down from generation to generation about fully formed chimera’s.

Clive Nicoli (Adrien Brody) and Elsa Kast (Sarah Polley) are two brilliant scientists who are developing gene-splicing technology to create new species. They have just put the finishing touches on their newest creature, “Fred”, a large dog-sized wormlike creature that produces proteins beneficial in growing crops. Clive and Elsa bring Fred to meet his companion, Ginger, a female version of this new species. The two instantly get along well and start imprinting (weird tendrils come out and start circling one another). Elsa and Clive are pleased that the two are getting along so well.

Barlow (David Hewlett) is excited about the development of the proteins and takes the pair to meet with the head of Newstead Inc, Joan Chorot (Simona Maicanescu). Joan tells the pair that their splicing laboratory will be converted into a protein observation lab so that they can identify and synthesize the gene developing the growth protein in Fred and Ginger. Elsa and Clive immediately object; they had planned to incorporate human DNA into the splicing procedure in order to start work on curing numerous genetic disorders. Barlow makes it clear that the company doesn’t have a choice: They need profits to offset the cost of the splicing technology and the protein is the only way to do that. Joan tells them that in five years, they should be able to start testing with human genes.

Elsa and Clive go back to the lab and immediately start testing to see if they can produce a viable hybrid with human DNA. They try numerous iterations, but get frustrated with each failed attempt. Clive gets lucky and accidentally finds the best fit when Elsa gives him a new genetic sample from a Jane Doe. They produce some genetic material and put it on ice, so that they will have a starting point in 5 years time. On the way to storage, Elsa hijacks the material and takes it to the fertilization portion of the lab, changing the password to the room so that Clive won’t be able to interfere. He reminds her that they could go to jail for what she’s doing but Elsa insists that they won’t carry the fetus to term, just see if it can sustain growth. Clive debates aborting the fertilization, but decides against it at the last minute, allowing Elsa to have her experiment.

Clive and Elsa relegate most of their work onto their team, headed up by Clive’s brother, Gavin. Instead of synthesizing the protein, they spend their time studying the splice fetus as it develops at an astonishing rate. They go home to their apartment after work. Elsa shows Clive an apartment she wants to get, but Clive says he doesn’t feel like moving around after, since it’s not big enough for a child. Elsa says she doesn’t want to accommodate a third party who doesn’t even exist. They curl up and prepare to go to bed, but Clive’s phone goes off: The fetus in the lab is past maturity and trying to leave the artificial womb.

The couple arrives at the laboratory and sees the machinery leaking. Elsa puts her hand inside of the artificial womb in order to pull the specimen out but the specimen bites her and doesn’t let go of her hand. Clive breaks the container and cuts the artificial womb with a surgical scalpel. He stabs the specimen and it falls onto the floor. Clive puts a plastic container over it to keep it from moving and goes to treat Elsa’s wounds.
After bandaging Elsa’s arm, the two go to examine the specimen but it doesn’t move. Clive and Elsa think that it’s dead, so Clive leaves the room to get a scalpel to perform an autopsy. Elsa examines the specimen’s corpse, but discovers that it is merely a shell: The specimen has evolved into something new and escaped the containment box. Elsa sees the weird new creature walking around like a chicken, but crashing into everything. Clive wants to gas the room and kill it, but Elsa removes her mask so that the specimen can live. Over the next few days, the pair examines the creature. They take X-rays of its body and study its habits to determine what it eats and how it develops. It goes from having no arms and a thin torso to developing into a child like humanoid stage, with 4 fingers, weird legs and a tail that has a sharp blade shoot out of it.

This short overview of the movie is a context for a wider argument about the direction that human genetics is now moving in. What if you saw a hybrid like the one pictured above? How would you react. Would you shun it? Would you embrace it? The big question that films like Splice and Avatar raise, is that it explores what is human? When the protagonist in Avatar becomes one of the Navi, is he still human? What is the soul? Where does it reside? What about the creature developed in Splice? What is human?

Britain is leading the way in terms of the mixing of human and animal genetic material. As scientists continue to use human genes implanted in animals to create new medicines and understand our biology, it seems increasingly likely that we’ll blur the genetic distinctions between man and beast. The UK wants to be ready. After polling citizens and researchers alike, the British Academy of Medical Sciences released a report detailing how they believed the nation should handle all future blending of human and animal genes: very carefully. They recommend that research involving “Animals Containing Human Materials” (ACHM) should be overseen by a regulatory body, it should be categorized according to the degree in which human genes are used, and Britain should try to influence other nations to do the same. With a strong chance of impacting scientific research in both the UK and the rest of the globe, the Academy’s recommendations are an indication of how governments (and their people) may influence the path of genetic science to prevent the creation of ‘monsters’. Yet in many ways the mixing of animal and human DNA has already progressed so far that no regulations may be able to control it. Too little too late?

In the creation of the report from the British Academy of Medical Sciences, they interviewed more than a thousand UK citizens in multi-day discussions on the nature of transgenic science. Overall, attitudes towards ACHM were positive when portrayed as helping to create new medicines or to cure genetic diseases. In fact, the opposition towards this research could largely be attributed to three areas of concern. People were uncomfortable with scientists: 1) modifying animal brains to be more human, 2) creating human embryos inside animals, and 3) changing animals to have more human-like appearances and/or behaviors.
“I don’t necessarily like it, but if it delivers benefits then it’s worth it.”

– Participant of public dialogue on ACHM

“I don’t have a problem with it until it gets to the brain – liver, heart, etc. are all fine. It’s the brain which makes people humans.”

– Public Dialogue, Newcastle.

Of course, as admirable as it is that the UK is considering the most ethical ways of handling ACHM, I think there’s little chance they’d be able to stop the most ‘heinous’ forms of human-animal hybridization from occurring. As the Academy points out in their report, splicing human genes into animals is a commonplace practice in many labs in the UK and the world. We’ve discussed many successful experiments that were only made possible by using mice and rats with human genes. From curing Alzheimer’s to transmogrifying skin cells, transgenic rodents have become a mainstay of research. In their coverage of the Academy report, Reuters highlights how scientists have created a Down’s Syndrome mouse with 300 human genes, and another rodent whose liver is comprised of 95% human cells. Such experiments have an enormous potential to help us through improvements in medical science and in many cases represent the best opportunities we have to challenge horrendous diseases. So there’s obvious moral pressure to continue that research (which, to be clear, the Academy’s report totally supports).

There’s also economic pressure. One of the best (and most popular) anti-coagulants/anti-inflammatory medications is created from the milk of goats that have been spliced with human genes (brand name: ATryn). Genetically modified food animals are likely on the verge of making a large impact on our meat markets, either because they grow more quickly or because they have distinct advantages compared to their natural cousins. Do we honestly believe that if splicing in a human gene would improve the profitability of these animals, companies wouldn’t be eager to try such modifications? There’s money to be made in the most liberal use of genetic alterations to animals.

Clearly then, money and medical concerns are going to continue pushing scientists to find more ways of utilizing human genes in animals, and vice versa. The UK style of regulation might be able to cope with such pressures, but that’s just the beginning. We’ve reached a point in genetics, a background level of understanding, that makes it possible to splice genes relatively easily between certain mammals. As we get better at all the ‘approved’ kinds of ACHM research, the ‘forbidden’ types are going to get easier too. Somewhere, at some point, some institutions are going to take steps in creating human-animal chimeras that will astound and horrify mainstream citizens. As Reuters points out, Chinese scientists have already spliced human stem cells into a goat fetus. Other researchers around the world will follow. Even if you could regulate 90% of genetic science, the remaining 10% is going to keep going. The technology is too advanced to keep everyone from crossing some arbitrary line Britain draws in the sand.

The Vacanti mouse was a laboratory mouse that had what looked like a human ear grown on its back. The “ear” was actually an ear-shaped cartilage structure grown by seeding cow cartilage cells into a biodegradable ear-shaped mold. The earmouse, as it became known as, was created by Dr. Charles Vacanti, at the University of Massachusetts in 1995. Created to demonstrate a method of fabricating cartilage structures for transplantation into human patients, a resorbable polyester fabric was infiltrated with bovine cartilage cells and implanted under the skin of a hairless
mouse. The mouse itself was a commonly used strain of immunocompromised mouse, preventing a transplant rejection.

In July 2011 a report emerged in that one hundred and fifty animal-human hybrid embryos had been produced by scientists in the UK - with full government approval - under the 2008 Human Fertilization Embryology Act. Three laboratories in the UK were granted government licenses to play God with these human-animal embryos: King's College London, Newcastle University and Warwick University.

They also created chimeras, a mixture of human cells and animal cells, much like what happened in the sci-fi Planet of the Apes depiction of science gone wrong. It still has not yet been revealed which animals were used in the chimera and cybrids, but it's almost certain that they were mammals. Furthermore, the closer the genetic code of the animals to humans, the more likely the embryos would be viable, so it seems likely that these scientists would have been using eggs from monkeys or apes combined with humans.

All have now stopped creating hybrid embryos due to a lack of funding, but scientists believe that there will be more such work in the future. None of these embryos were allowed to grow into foetuses, by the way. Current UK law requires them to be destroyed after 14 days. But that's only the law. Who knows what kind of mad science is being conducted in the basement of corporate laboratories, away from the view of UK regulators and well outside the bounds of the law. That the UK "scientific" community is dabbling in such dark arts is, of course, shocking to many people.

If there was one sin above another which called for the destruction of the race by the flood, it was the base crime of amalgamation of man and beast which defaced the image of God, and caused confusion everywhere. God purposed to destroy by a flood that powerful, long-lived race that had corrupted their ways before him. He would not suffer them to live out the days of their natural life, which would be hundreds of years during antediluvian era.

Understanding the Sumerian era in part 1 of this series we know according to the book of Enoch, Jasher Jubilees and Genesis that some horrific genetic experiments took place during that era which involved the mixing of angels and humans as well as humans and animals. It is interesting that in Matthew it says that the end times before the second Coming of Christ will be akin to the days of Noah because the days of Noah are described as follows.

And they began to sin against birds, and beasts, and reptiles, and fish, and to devour one another's flesh, and drink the blood. Then the earth laid accusation against the lawless ones. I Enoch 7:5-6

And lawlessness increased on the earth and all flesh corrupted its way, alike men and cattle and beasts and birds and everything that walketh on the earth-all of them corrupted their ways and their orders, and they began to devour each other, and lawlessness increased on the earth and every imagination of the thoughts of all men (was) thus evil continually. And God looked upon the earth, and behold it was corrupt, and all flesh had corrupted its orders, and all that were upon the earth had wrought all manner of evil before His eyes. And He said: "I shall destroy man and all flesh upon the face of the earth which I have created." Jubilees 5:2-4

And their judges and rulers went to the daughters of men and took their wives by force from their husbands according to their choice, and the sons of men in those days took from the cattle of the earth, the beasts of the field and the fowls of the air, and taught the mixture of animals of one species with the other, in order therewith to provoke the Lord; and God saw the whole earth and it was corrupt, for all flesh had corrupted its ways upon earth, all men and all animals. And the Lord said, I will blot out man that I created from the face of the earth, yea from man to the birds of the air, together with cattle and beasts that are in the field for I repent that I made them. Jasher 4:18-19

And the LORD said, I will destroy man whom I have created from the face of the earth; both man, and beast, and the creeping thing, and the fowls of the air; for it repenteth me that I have made them. Genesis 6:7
Through genetic engineering, the antediluvian era created blended beings, not entirely human or animal, creatures that neither humans nor animal spirits would indwell, for they were neither man nor beast. This provided bodies into which they could extend themselves in the same way we see in the movie Avatar. Dr. Scott Johnson who owns the http://www.contendingfortruth.com website says that the "Na'vi" of AVATAR, or modern "Nephilim" are created in DNA Laboratories. The oversized characteristics of the Na'vi in the film AVATAR are set to resemble that of the ancient demonic Nephilim in size and stature.

The Na'vi in the movie “Avatar” are obviously humanoid beings with animal characteristics as well. This blending of Human and animal DNA results in the inspiration for the Na'vi in which James Cameron actually substituted for the name “Nephilim" for obvious reasons.

The Illuminati have used the guise of "Archaeology" to scour the earth for the ancient burial sites of these ancient abominations, so they can collect and harvest the DNA from the bones of these ancient abominations which God Himself destroyed by the Biblical flood of Noah's day.

Given what is happening in science today, Christian researcher Torm Horn wonders if modern biotechnology may be about to repeat the science of the antediluvian, and, worse, provide a pathway for the return of the Nephilim.

Today, molecular biologists classify the functions of genes within native species but are unsure in many cases how a gene’s coding might react from one species to another. In recombinant DNA technology, a “transgenic" organism is created when the genetic structure of one species is altered by the transfer of a gene or genes from another. This could change not only the genetic structure of the modified animal and its offspring, but its adaptive development, sensory modalities, disease propensity, personality and behavior traits among other things.

Such transgenic tinkering already exists in many parts of the world including the United States, Britain and Australia, where animal eggs are being used to create hybrid human embryos from which stem cell lines can be produced for medical research. Researchers in the UK have already managed to reanimate tissue “from dead human cells in another breakthrough which was heralded as a way of overcoming ethical dilemmas over using living embryos for medical research.” In the United States, similar studies led Irv Weissman, director of Stanford University’s Institute of Cancer/Stem Cell Biology and Medicine in California to create mice with partly human brains, causing some ethicists to raise the issue of...
“humanized animals” in the future that could become “self aware” as a result of genetic modification. President Bush in his Jan. 31, 2006, State of the Union Address, called for legislation to “prohibit … creating human-animal hybrids, and buying, selling, or patenting human embryos.”

Not everybody shares these concerns. A radical, international, intellectual, and cultural movement known as “Transhumanism” supports the use of new sciences including genetic modification to enhance human mental and physical abilities and aptitudes so that “human beings will eventually be transformed into beings with such greatly expanded abilities as to merit the label ‘posthuman.’”

Dr. James Hughes, executive director of the Institute for Ethics and Emerging Technologies, is a transhumanist who teaches at Trinity College in Hartford, Conn. He is also the author of “Citizen Cyborg: Why Democratic Societies Must Respond to the Redesigned Human of the Future,” a sort of bible for transhumanist values.

Over the last two years numerous law schools including Stanford and Oxford have hosted “Human Enhancement and Technology” conferences where transhumanists, futurists, bioethicists and legal scholars merged to discuss the ethical and legal ramifications of posthumans.

In his book “Life, Liberty and the Defense of Dignity: The Challenges of Bioethics,” the former chairman of the President’s Council on Bioethics, Leon Kass, provided a status report on transhumanism. He warned in the introduction that

“Human nature itself lies on the operating table, ready for alteration, for eugenic and psychic ‘enhancement,’ for wholesale redesign. In leading laboratories, academic and industrial, new creators are confidently amassing their powers and quietly honing their skills, while on the street their evangelists are zealously prophesying a posthuman future. For anyone who cares about preserving our humanity, the time has come for paying attention.”

Tom Horn states,

“But imagine the staggering implications of such science if dead Nephilim tissue was discovered with intact DNA and a government or rogue agency somewhere was willing to clone or mingle the extracted organisms to make Homo-nephilim”

“If one accepts the biblical story of giants as real, such discovery could actually be made someday, or perhaps already has been and was covered up. The technology to resurrect the extinct species may already exist, and cloning methods are being studied now for use with bringing back Tasmanian Tigers, Wooly Mammoths and other extinct creatures.”
7. NANO TECHNOLOGY AND CYBERNETICS

It is an understatement to say that technology often works hand in hand with unseen forces to challenge our faith or to open new channels for spiritual warfare. This has been illustrated in thousands of ways down through time from the creation of Ouija boards for contacting the spirit world to online pornography gateways. But the current course upon which Grin [genetics, robotics, artificial intelligence, and nanotechnology] technology and transhumanist philosophy are taking mankind threatens to elevate the reality of these dangers to quantitatively higher levels.

Some of the spiritual hazards already surfacing as a result of modern technology include unfamiliar terms like “i-dosing,” in which teens get “digitally high” by playing specific internet videos through headphones that use repetitive tones to create binaural beats, which have been shown in clinical studies to induce particular brain wave states that make the sounds appear to come from the center of the head. Shamans have used variations of such repetitive tones and drumming to stimulate and focus the center mind for centuries to make contact with the spirit world and to achieve altered states of reality.

More broadly, the Internet itself, together with increasing forms of electronic information-driven technology, is creating a new kind of addiction by “rewiring our brains,” says Nora Volkow, world-renowned brain scientist and director of the National Institute of Drug Abuse.

This generation now finds itself in the time “like the days of [Noah]” Jesus Christ prophesied for the end of the age nearly two thousand years ago: “And as it was in the days of [Noah], so shall it be also in the days of the Son of man” (Luke 17:26).

Technology to merge human brains with machines is progressing at a fantastic rate. Nanotechnology—the science of engineering materials or devices on an atomic and molecular scale between 1 to 100 nanometers (a nanometer is one billionth of a meter) in size—is poised to take the development between brain-machine interfaces and cybernetic devices to a whole new adaptive level for human modification. This will happen because, as Dr. C. Christopher Hook points out:

“Engineering or manipulating matter and life at nanometer scale [foresees] that the structures of our bodies and our current tools could be significantly altered. In recent years, many governments around the world, including the United States with its National Nanotechnology Initiative, and scores of academic centers and corporations have committed increasing support for developing nanotechnology programs. The military, which has a significant interest in nanotechnology, has created the Center for Soldier Nanotechnologies (csn) [which is] interested in the use of such technology to help create the seamless interface of electronic devices with the human nervous system, engineering the cyborg soldier.”

CNN recently published an article discussing how in about four years time microchips will be implanted in people which will time release various medications. The article is also very much in tune with Transhumanism and its goals. Keep in mind that many technologies have a “good” side to them but the enemy has evil plans for such things.
“It sounds like something out of a sci-fi movie: A patient visits a doctor’s office and, after a brief surgical procedure, walks away with a microchip under her skin that delivers medication in precisely timed and measured doses. That scenario doesn’t seem so futuristic anymore. Researchers at the Massachusetts Institute of Technology (MIT) announced today that they have successfully completed the first trial of a drug-releasing microchip in humans. The results were published on the website of the journal Science Translational Medicine. The pacemaker-sized microchip devices, which were implanted near the waistline of seven 60-something women in Denmark, worked as intended, releasing up to 19 daily doses of an osteoporosis drug that ordinarily requires injections. The implants proved safe, and tests revealed that they delivered the medication as effectively as once-a-day shots.

Cybernetics may one day help the blind to see and the lame to walk…few things could actually be bigger than nanotechnology in terms of potential to revolutionize scientific and engineering research, improve human health and bolster our economy.”

We face the prospect of a century dominated by biotechnology challenges. And in case we are about to dismiss the quotes above as mere science fiction, it is worth remembering that just a few years ago human cloning was science fiction. Yet the cloning of human embryos for therapeutic purposes is not only happening now, it has also gained widespread public acceptance and support. Science fiction has become fact. If this can happen in such a short time then we can surely expect other developments in biotechnology to ‘go all the way’ as well.

We need to be clear that biotechnology is not inherently wrong. In fact, technology, generally speaking, is a human good. Humans are technologists by nature and by vocation. After all, we remain under the covenantal obligations to 'Be fruitful and increase in number; fill the earth and subdue it'. Wise stewardship of our created world requires some form of technology - even if no more sophisticated than a sharpened stick to plough a field for planting seed.

In 2002 the Sunday Times reported that ‘scientists have demonstrated that human thoughts can be converted into radio waves and used by paralysed people to create movement…the creation of cyborgs - part human, part machine - is becoming a reality. The term ‘cyborg’, or cybernetic organism, refers to the blending of technology and humanity. We already depend on technology such as glasses, hearing aids, pacemakers, false teeth etc. and therefore many of us are already, to a certain extent, 'cyborgs' - part human, part machine.

However, Kevin Warwick, a professor at Reading University, believes the 'cyborg evolution' is inevitable and, because of the speed of development of computers, is vital to our very survival. He is quoted as saying, 'Ultimately, humans will become a lower form of life, unable to compete with either intelligent machines or cyborgs. If we do not adapt, he claims, 'the alternative is to have intelligent machines running everything. I don't really fancy that…but this alternative I see as quite a positive alternative: humans staying in control of what is going on, even though we have to become cyborgs to do it.'

Warwick has conducted personal experiments to meld man and machine: he and his wife had electrodes implanted in their wrists, connected to each other and to a computer. They were then able to send pulse messages between each other via their nervous systems. He believes that the potential for this kind of communication is huge - computers could be commanded by nothing but thoughts, people could think to each other instead of speaking, people could have extra memory etc.

There is of course enormous potential for improving the capabilities of the disabled, which is what drives many of the current developments in this field. One team implanted miniature transmitters into the brains of terminally ill people suffering from degenerative conditions that rendered them unable to communicate. Their thoughts alone enabled them to create movement. It was said: 'Ultimately the
technology will be used for people whose spinal cords are destroyed in accidents or those handicapped by strokes.'

The potential to do such things through technology is both exciting and remarkable. Scientists in Australia have developed a 'mind switch' that enables people to activate electrical devices (e.g. turn on a radio or open doors) by thinking. Kevin Warwick has achieved a similar feat using an implanted chip at Reading University. For the disabled, this kind of technology could massively enhance their lives. In another experiment, two patients with locked-in syndrome had brain implants inserted and were then linked to a computer, enabling their minds to control a cursor on a screen and thus communicate. As for the blind seeing - researchers are now working on implanting artificial retinas into the eyes of blind patients suffering from particular nerve disorders.

However the technology will undoubtedly grow beyond helping people with disabilities because, of course, another purpose of cybernetics is to improve our connectivity with others and assist us in performing specific duties. Brain chips or implants could also become available for use by the non-disabled, to provide access to the internet and other electronic devices. Anyone could then be an instant 'expert' in any area. Research is being carried out on 'wearable computers', the purpose of which would be to provide the wearer with permanent access to computer networks and constant communication with others.

In 2002 three members of a Florida family were implanted with ID chips, a tamper proof form of identification. As one journalist commented, 'The chip has no medical purposes. It is for security, or financial or other identification purposes only.' The makers anticipated demand that would create 'millions' of similar cyborgs over the next few years.

Nanotechnology may be the 'smallest' field of science - the manipulating of individual atoms. But researchers have come to understand that in science and technology, few things could actually be bigger than nanotechnology in terms of potential to revolutionize scientific and engineering research, improve human health and bolster our economy.

Nanotechnology is the science of tiny objects. It is the term applied to the study, manipulation and engineering of systems or devices at a minute level, ie less than 100 nanometers, or 10,000th of the diameter of a human hair. Nanotechnology is not strictly speaking a technology, but a size - the nano-scale, at which atoms and molecules, the building blocks of all matter, operate. The convergence of all the new technologies (genetics, robotics, artificial intelligence, IT and nanotechnology) hinges on mastering nano-scale engineering and technology.

In the words of a UK government report: 'The ultimate goal of nanotechnology is to produce tiny devices, some of which may be able to design and build other devices.' These 'nanorobots' would be implantable...
devices that could theoretically detect and destroy cancerous cells and sites of infection, repair genetic
mutations, deliver precisely targeted drug therapy, replace cellular structures with other materials etc.
According to the report, while this may be a dream, some scientists believe that the reality behind the
science may be seen in the next 20-30 years. But other products, which rely on nanotechnology, may
not be so far away, such as molecular electronic switches, improved sun creams and cancer treatments.
In medicine, nanoceramics are already being used as bone replacement agents.[13] Other nanotech
products on the market at the moment include lighter, stronger tennis rackets, harder dental fillings and
burn dressings. Computer scientists have also made use of nanotechnology to create implants for use in
the brains of rats, so that they can be controlled and directed by a remote computer.

The logic behind nanotechnology lies in the simple fact that all substances (life and non-life) are
qualitatively the same at the nanoscale - all are made up of atoms arranged in different ways. In other
words, there is material unity at the nano-scale. So if events can be manipulated at the nano-scale, this
could allow the control of events on the macro-scale, and there are several potential medical
applications: 'Neurons could be re-engineered so that our minds talk directly to computers or to artificial
limbs. Viruses could be re-engineered to act as machines or weapons.' Nanorobots could also be
designed to 'cruise' the bloodstream, able to attack pathogens, build cells or perhaps even organs.

There is serious commitment to nanotechnology, as well as awareness of its potential use in the
development of biological weaponry. It is a fast growing area of scientific research, attracting large
amounts of money. The Department of Trade and Industry has allocated £90 million for nanotechnology,
to help British companies in this field. The US has the National Nanotechnology Institute and late last
year President Bush allocated $3.7 billion to nanotech research and development.

These technologies are undoubtedly exciting and may well help the blind to see and lame to walk. But
they have potential dark sides. As the government report says, 'Nanotechnology will do wonderful things.
But there are almost bound to be risks attached to its usage.'

Neither cybernetics nor nanotechnology are easy to understand, let alone engage with: 'the field is vast
and the potential applications numerous. It is this very breadth of possible applications that makes it
difficult to predict where the greatest risks of nanotechnology lie.' Nevertheless, there are a number of
issues Christians should think through as we become aware of the different applications of these
biotechnologies.

ACCESS AND JUSTICE: Who will (or should) have access to these new technologies? Some see them
as a means of levelling the playing field to make all people equal. However history has shown us that
technology tends to do the opposite and often aggravates the differences between and within cultures -
between those who have and those who do not. The implants for paralysed patients discussed above
cost more than £30,000 per patient. The 'haves' will be genetically and technologically enhanced, while
the 'have-nots' will continue to die of starvation, AIDS and other poverty-driven diseases. We ought to
call on lawmakers to use our scarce resources to address the urgent needs of the suffering and poor
who have curable diseases before we talk about 'enhancing' them.

THE THREAT OF NANOROBOTS: It has been claimed that nanotechnology poses a significant threat
to the human race through the creation of devices that could destroy life on a vast scale. This could be
via the building of 'assemblers', machines the size of a DNA strand with the ability to move atoms around
and put them precisely wherever they were wanted. In other words, they could potentially build anything,
and do so fast. So, the theory goes, nanorobots could be designed as killers; microscopic plagues
carried in the wind or water supply. Some nanorobots could replicate themselves quickly - a potentially
useful attribute - but, it is claimed, this self-replication could become out of human control and potentially
unstoppable. More recently, concerns have been expressed about the potential physical hazards to health of environmental and human 'pollution' by nanoparticles.

**TREATMENT AND ENHANCEMENT:** Treating an illness is one thing; enhancing or engineering a 'better' human being is another. With both cybernetics and nanotechnology, the difficulty in defining the line between treatment and enhancement is of great concern. At what point does a technology that aims to cure or treat a 'disease', or restore lost capacities, become one that aims to improve already healthy systems, or to advance capacities in some way? When does health end and a quest for physical and mental perfection begin? It is not necessarily always clear and may be partly culturally determined. It can also take very little to move from one to the other.

Medicine and biotechnology should address itself to the elimination of pathology, but not the enhancing of normality. The danger is that even if clear distinctions are apparently made, it is all too easy to 'reassess' and change these definitions - what is 'normality'? It is likely to prove difficult to prevent the use of technologies for enhancement. A treatment for one may be an enhancement for another. What happens when it becomes an infringement of human rights to deny the right to personal enhancement or improvement, to deny individual choice and autonomy? Further down the line, what about social pressure to undergo enhancement, or discrimination against the unenhanced? How about the pressure to enhance certain professionals - the memories of doctors, perhaps, or the sight and stamina of soldiers? Bill McKibben in his recent book “Enough” offers some stark illustrations about where all this could lead.

As previously stated, it is good to have technological development that will help us to heal and do good. Jesus himself healed, but only that which was lost by illness or the effects of sin. He did not make people more intelligent, stronger, or taller; nor did he encourage them to pursue immortality on earth.

John Wyatt uses a helpful illustration to show how we might attempt, as Christians, to analyse controversial technological advances: if we see our bodies as wonderful, original artistic masterpieces reflecting the design of God, but marred by biological and moral flaws, what is our responsibility to this masterpiece and what can we do with it? Ethical intervention is that which seeks to protect, maintain and restore the original, operating within the parameters fixed by the artist. Unethical restoration is that which seeks to enhance, alter or improve the original design. Perhaps we just need to ask, what does it really mean to be human?

**REMAKING HUMANITY:** Some advocates of these technologies see them, ultimately, as a means to free themselves and the rest of humanity from the physical confines of the human body. This goal is best expressed by transhumanists such as Kevin Warwick, quoted earlier. They argue that the body, with its limitations and mortality, needs to be transcended and that the only way humans will do so is by merging with machines. Transhumanism assumes a blind faith in inevitable progress through science and technology, as well as radical autonomy and the right of the individual to control and engineer their own destiny. It has partly arisen out of postmodern thinking, the rejection of objective truth and the belief that there is nothing intrinsically valuable about the human form. We humans are thus free to change ourselves in whatever way we want. We can foster whatever 'image' we desire.

Before we dismiss these views as simply those of extremists, it is worth noting that the US government produced a lengthy manifesto in 2001 entitled Converging Technologies for Improving Human Performance. This debate is not simply about disease prevention and cure, and nor is it just of interest to 'harmless techno geeks'.

PARATECHNOLOGY
In contrast, the Bible is clear that God loves us as ourselves in our weakness, not our strength; he wants us to rely on him, not ourselves and our own abilities. Moreover, suffering for Christians is not only to be expected, but is for a purpose and reason - to increase our reliance and dependence on God himself.

These technologies also raise challenges to our understanding of what it means to be made in the image of God. Although there are multiple interpretations of this image in man, the Bible is clear that it plays a large part in the high value that God places on mankind. The image of God relates to some way that man resembles his Creator and it defines man as a morally significant entity. Our imaging of God is an intrinsic feature, inseparable from our humanness; it results simply from us being human beings born of human parents. Man is not simply a collection of biological parts and functions, or a 'property-thing' that has been put together in the right way and that we can do what we like with. This is incompatible with a biblical view of humanity where all human beings have worth and dignity regardless of what they can or cannot do.

Thus Christians should reject transhumanism, and enhancements of the human condition, remembering that we were made not for performance but for a loving relationship with God: 'In wanting to become more than we are, and in sometimes acting as if we were already superhuman or divine, we risk despising what we are and neglecting what we have.'

Although technological and medical advances will make it possible to do many things, they will not guide us in what we ought to do. Scientists and policy makers have increasingly become unable to offer any meaningful distinction between what they can do and what they should do. This is why economics, practicalities and safety considerations so often become our culture's determining values or ethics.

Currently, developments in cybernetics and nanotechnology appear to be accelerating ahead of sufficient ethical reflection and appropriate control. We needn't necessarily be fearful of the technologies themselves. Yet we do need to be wise and courageous in understanding where cybernetics and nanotechnology may be used in good and moral ways, but also where they need controlling, so that the technology does not control us.

But what can we do? Even though private companies dominate biotech developments we are not left completely powerless in a democratic society. We have the right and the opportunity as consumers, taxpayers, and voters to express our views to politicians and regulators. Biotech developments ought to be subject to democratic regulation and the opinions of non-scientists ought to count: 'We are not powerless but we must learn to engage effectively in the public debate; not with knee-jerk anti-technology attitudes but by asking the big questions.'

One of the tasks of Christians is to stay ahead of the bioethics current; to think now, not later, about the sort of society we want. We need to try and anticipate with the scientists what various novel experiments will mean and suggest ethical ways to pursue our common interest in serving humanity. The introduction of a new technology often follows a common path - first its development behind closed doors, then the winning over of the public with predictions of life-saving advances, then finally, a regulatory regime to fit the already completed package. Clearly it is much better to have regulatory regimes set up earlier in the process. Denis Alexander, talking about new technologies, calls on Christians to 'undertake the hard slog necessary to assess their possible benefits. We worship God by our actions and are condemned for our failure to act (James 4:17).'

For those who can, forming genuine relationships with scientists and actually hearing their concerns, motivations, and desires will prove essential to address effectively this forthcoming generation of bioethical challenges. Secular bioethicists have long been providing guidance behind the scenes by
serving on ethics committees and building relationships with scientists. Christians also need to volunteer their service*es and partner with scientists, as well as with secular bioethicists, at their local universities and hospitals.

For all of us, however, there is always the opportunity and challenge to love our neighbour as ourselves and to demonstrate in caring relationships and communities the equal worth, dignity and value of every individual human life.

Cloning, biotechnology, nanotechnology, and robotics are blurring the lines between nature and machine. In his 1972 speech "The Android and the Human," science-fiction visionary Philip K. Dick told his audience,

"Machines are becoming more human. Our environment, and I mean our man-made world of machines, is becoming alive in ways specifically and fundamentally analogous to ourselves."

In the near future, Dick prophesied, a human might shoot a robot only to see it bleed from its wound. When the robot shoots back, it may be surprised to find the human gush smoke. "It would be rather a great moment of truth for both of them," Dick added.

In November 2001, Advanced Cell Technology of Massachusetts jarred the nation's focus away from recession and terrorism when it announced that it had succeeded in cloning early-stage human embryos. Debate on the topic stayed equally divided between those who support therapeutic cloning and those, like the American Medical Association, who want an outright ban.

Karel Capek coined the word robot (Czech for "forced labor") in the 1920 play R.U.R., in which machines assume the drudgery of factory production, then develop feelings and proceed to wipe out humanity in a violent revolution. While the robots in R.U.R. could represent the "nightmare vision of the proletariat seen through middle-class eyes," as science-fiction author Thomas Disch has suggested, they also are testament to the persistent fears of man-made technology run amok.

Similar themes have manifested themselves in popular culture and folklore since at least medieval times. While some might dismiss these stories simply as popular paranoia, robots are already being deployed beyond Hollywood and are poised to take over the deadlier duties of the modern soldier. The Pentagon is replacing soldiers with sensors, vehicles, aircraft, and weapons that can be operated by remote control or are autonomous. Pilot less aircraft played an important role in the bombings of Afghanistan, and a model called the Gnat conducted surveillance flights in the Philippines in 2002.

Leading the Pentagon's remote-control warfare effort is the Defense Advanced Research Projects Agency (DARPA). Best known for creating the infrastructure that became the World Wide Web, DARPA is working with Boeing to develop the X-45 unmanned combat air vehicle. The 30-foot-long windowless planes will carry up to 12 bombs, each weighing 250 pounds. According to military analysts, the X-45 will be used to attack radar and antiaircraft installations as early as 2007. It is now programmed to distinguish friends from foes without consulting humans and independently attack targets in designated areas. By 2020, robotic planes and vehicles will direct remote-controlled bombers toward targets, robotic helicopters will coordinate driverless convoys, and unmanned submarines will clear mines and launch cruise missiles.

Rising to the challenge of mixing man and machine, MIT's Institute for Soldier Nanotechnologies (backed by a five-year, $50-million U.S. Army grant) is busy innovating materials and designs to create military uniforms that rival the best science fiction. Human soldiers themselves are being transformed into modern cyborgs through robotic devices and nanotechnology.
The 2002 International Conference on Robotics and Automation, hosted by the Institute of Electrical and Electronics Engineers, kicked off its technical session with a discussion on biorobots, the melding of living and artificial structures into a cybernetic organism or cyborg.

"In the past few years, the biosciences and robotics have been getting closer and closer," says Paolo Dario, founder of Italy's Advanced Robotics Technology and Systems Lab. "More and more, biological models are used for the design of biometric robots [and] robots are increasingly used by neuroscientists as clinical platforms for validating biological models." Artificial constructs are beginning to approach the scale and complexity of living systems.

Some of the scientific breakthroughs expected in the next few years promise to make cloning and robotics seem rather benign. The merging of technology and nature has already yielded some shocking progeny. Consider these examples:

- Researchers at the State University of New York Health Science Center at Brooklyn have turned a living rat into a radio-controlled automaton using three electrodes placed in the animal's brain. The animal can be remotely steered through an obstacle course, making it twist, turn, and jump on demand.
• In May 2002, eight elderly Florida residents were injected with microscopic silicon identification chips encoded with medical information. The Los Angeles Times reported that this made them "scannable just like a jar of peanut butter in the supermarket checkout line." Applied Digital Solutions Inc., the maker of the chip, will soon have a prototype of an implantable device able to receive GPS satellite signals and transmit a person's location.

• Human embryos have been successfully implanted and grown in artificial wombs. The experiments were halted after a few days to avoid violating in vitro fertilization regulations.

• Researchers in Israel have fashioned a "bio-computer" out of DNA that can handle a billion operations per second with 99.8% accuracy. Reuters reports that these bio-computers are so minute that "a trillion of them could fit inside a test tube."

• In England, University of Reading Professor Kevin Warwick has implanted microchips in his body to remotely monitor and control his physical motions. During Warwick's Project Cyborg experiments, computers were able to remotely monitor his movements and open doors at his approach.

• Engineers at the U.S. Sandia National Labs have built a remote-controlled spy robot equipped with a scanner, microphone, and chemical microsensor. The robot weighs one ounce and is smaller than a dime. Lab scientists predict that the microbot could prove invaluable in protecting U.S. military and economic interests.

The next arms race is not based on replicating and perfecting a single deadly technology, like the nuclear bombs of the past or some space-based weapon of the future. This new arms race is about accelerating the development and integration of advanced autonomous, biotechnological, and human-robotic systems into the military apparatus. A mishap or a massive war using these new technologies could be more catastrophic than any nuclear war.

The rate at which Genetics, Nanotechnology and Robotics (GNR) technologies are being adopted by our society-without regard to long-term safety testing or researching the political, cultural, and economic ramifications-mirrors the development and proliferation of nuclear power and weapons. The human loss caused by experimentation, production, and development is still being felt from previous era’s.
The discussion of the environmental impacts of GNR technologies, at least in the United States, has been relegated to the margins. Voices of concern and opposition have likewise been missing in discussions of the technological Singularity. The true cost of this technological progress and any coming Singularity will mean the unprecedented decline of the planet's inhabitants at an ever-increasing rate of global extinction.

The World Conservation Union, the International Botanical Congress, and a majority of the world's biologists believe that a global mass extinction already is under way. As a direct result of human activity (resource extraction, industrial agriculture, the introduction of non-native animals, and population growth), up to one-fifth of all living species are expected to disappear within 30 years.

A 1998 Harris Poll of the 5,000 members of the American Institute of Biological Sciences found that 70% believed that what has been termed "The Sixth Extinction" is now under way. A simultaneous Harris Poll found that 60% of the public were totally unaware of the impending biological collapse.

At the same time that nature's ancient biological creation is on the decline, laboratory-created biotech life-forms-genetically modified soybeans, genetically engineered salmon, cloned sheep, drug-crops, biorobots—are on the rise.

Nature and technology are not just evolving; they are competing and combining with one another. Ultimately they will become one. We hear reports daily about these new technologies and new creations, while shreds of the ongoing biological collapse surface here and there. Past the edges of change, beyond the wall across the future, anything.
8. ARTIFICIAL INTELLIGENCE

The major developments in cybernetics and cyberbiology will occur when computers are linked directly to the human nervous system. Breakthroughs in this area have been staggering. It is possible to use the nerves of the arm to control bionic arms or even other machines; e.g., computer-controlled electrodes can be used to stimulate hand muscles by moving the shoulder. In another example, a digital video camera was used to replace the eyes of a blind man; electrical signals were processed by a micro-computer and then transmitted to the nerves in the visual cortex by way of electrodes giving the patient an archaic but effective vision as bright dots, resembling a stadium display.

Communicating with the brain is becoming increasingly powerful. It's possible to control the mouse of the computer by thinking certain movements. A type of helmet is used to analyze the activity of the brain by measuring brain waves and then tell the computer what the human is thinking of.

José Del Millan's team in Italy built a system of measuring brain patterns in which a patient chose letters solely by thinking of certain movements. More recently, a patient who suffered a brain stem stroke was linked to a computer. Communication was achieved by using a hollow glass cone with gold recording wires treated with neurotrophic factors. The patient learned how to control the signal so that it acted as a binary switch. Moreover, a group of scientists was able to read monkey's thoughts and transmit them as commands to a robot.

Another goal of the same system is to allow mute persons to speak by simply thinking of the words. Finally, mice were trained using a system of rewards to pull a lever; scientists identified the activity of the brain giving the signal to pull the lever; being able to detect the thought for the action, scientists gave the reward to the mice simply if the animals thought about pulling the lever; mice soon learned that by thinking about pulling the lever instead of actually pulling it they would get their reward.

Scientists believe that if the human brain can communicate with computers, then it is theoretically possible to enhance the human mind. For example, a research group headed by Ehud Shapiro at the Weizmann Institute of Science in Israel used living cells to develop a biological nanocomputer. By using the DNA machinery as hardware and DNA molecules as software, they created a mathematical computing machine, called a finite automaton. A biological nanocomputer opens the door to creating computers that can augment human intellectual abilities.

When previous world chess champion Gary Kasparov was defeated by the Deep Blue computer in 1997, he and the chess world were outraged. Sound bites included: "Something strange is going on", "It didn’t play a regular game of chess", "It didn’t play like a human" and “It didn't play fair”.

But no one asked the most important question – how did it win?

The key here was a new intelligence had entered the game: a powerful computer that didn’t think like us. And nor should it, because it was bringing a new dimension and a new way of solving the problem.

Between the years 1975 and 1995 all the technologies of visualisation that we enjoy today were in their infancy. Electronic displays, Virtual Reality (VR), Augmented Reality (AVR) and 3D all existed, but all were basic, big, power hungry, expensive and the preserve of large laboratories.
Since 1995 technology advances have seen huge improvements in resolution, fidelity, sensitivity, power consumption, size, weight, and dramatic reductions in cost. In addition, computing power and memory have grown exponentially, with optical fibre and wireless connectivity seemingly becoming ubiquitous. There has also been a realisation that networking is a primary mechanism for collaboration.

Further developments of note are those in humanoid and non-humanoid robotics, telepresence, artificial life, modelling and games, 3D replicators, nano-structures, bio-manipulation and design, plus of course the rise in machine-based intelligence.

"In contrast with our intellect, computers double their performance every 18 months," 12 warned the genius physicist Stephen Hawking’s in an interview with the German newsmagazine Focus. "So the danger is real that they could develop intelligence and take over the world." Hawking, the wheelchair-bound author of the best-selling book "A Brief History Of Time," serves as the Lucasian professor of mathematics at Cambridge University, a post once held by Isaac Newton.

To prevent a "Terminator"-style standoff against the machines, Hawking advises us to improve our intelligence through genetic engineering, or perhaps by wiring ourselves to the computers directly. Said Hawking,

"We must develop as quickly as possible technologies that make possible a direct connection between brain and computer, so that artificial brains contribute to human intelligence rather than opposing it." 12

American author, inventor and futurist Raymond Kurzweil has become well known for predicting the future of artificial intelligence and the human race. His first book, The Age of Intelligent Machines, published in 1990, put forth his theories on the results of the increasing use of technology and predicted the explosive growth in the internet, among other predictions. Kurzweil predicts a breakthrough in artificial intelligence will enable the emergence of near immortal transhumanists by 2045.

That was Kurzweil's real secret, and back in 1965 nobody guessed it. Maybe not even him, not yet. But now, 46 years later, Kurzweil believes that we're approaching a moment when computers will become intelligent, and not just intelligent but more intelligent than humans. When that happens, humanity — our bodies, our minds, our civilization — will be completely and irreversibly transformed. He believes that this moment is not only inevitable but imminent. According to his calculations, the end of human civilization as we know it is about 35 years away.

The underlying assumption here is that artificial intelligence will speed up the rate of technological innovation by orders of magnitude. But is that really true? Look at the trend today: Computer power is still following the pattern of doublings, albeit with more difficulty. The shift toward use of more CPU cores to achieve this does not work for all problems.

The rosier Singularity view seems based on a few assumptions:

- Humans will create artificial intelligence.
- Humans (in some form) will survive the creation of artificial intelligence.
- Artificial intelligences will be far more productive than human minds.
- The nature of physical reality is such that large numbers of innovations remain to be found.
- Artificial intelligences will be capable of finding the remaining innovations fairly quickly.
Using brain implants it will become possible to exchange information by telepathy. We will be able to easily and quickly interact with other persons and the computer-based environment. Using the same system, it might become possible to control the human brain by radio signals at specific frequencies and transmitting specific information. Military applications will be huge. Instead of flying a plane, pilots can be attached to the plane and even feel the plane's structure from the inside and thus controlling it much.

We can reach a point when the exchange of information between minds happens at such a pace that hours of conversation will be condensed into a few seconds or milliseconds. A massive recombination of information will occur. This may, in some cases, mean a merge between the minds of two persons. It may even be possible to mass connect many minds to achieve a state of super-intelligence. We might lose our individuality but it might be the only way for humankind to survive.

In conclusion, these are some futuristic thoughts to wake up the imagination. Transhumanists believe we will become posthuman beings not just because of biological changes but also because of cybernetics. Each of us will have its own technological singularity; each of us will have its own upgrades and mechanical parts; we will become part organic part mechanic, cyborgs. In fact, scientists created an organisms half fish, half robot: a creature with a mechanical body controlled by the brain of a fish.

Scientists extracted the bloodstream and part of the spinal cord of a lamprey and then attached electrodes at a specific frequency to a special kind of neurons responsible for integrating command and sensory signals directed to the motor nerves while other electrodes monitored the axons, which are sort of the output of the circuitry; the brain was also wired into the robot making it respond to light stimuli in a variety of behaviors depending on the light. It's no longer science fiction, it's the future.

Former AI evangelist and robotics boffin Noel Sharkey gave his viewpoint to New Scientist.

*It is my contention that AI, and particularly robotics, exploits natural human zoomorphism. We want robots to appear like humans or animals, and this is assisted by cultural myths about AI and a willing suspension of disbelief. The old automata makers, going back as far as Hero of Alexandria, who made the first programmable robot in AD 60, saw their work as part of natural magic – the use of trick and illusion to make us believe their machines were alive. Modern robotics preserves this tradition with machines that can recognise emotion and manipulate silicone faces to show empathy. There are AI language programs that search databases to find conversationally appropriate sentences. If AI workers would accept the trickster role and be honest about it, we might progress a lot quicker.*

PARATECHNOLOGY PART 5: THE RISE OF TRANSHUMANISM
9. THE SINGULARITY INITIATIVE

Nikolai Kardashev proposed in 1964 that civilizations could be measured by their use of energy. The higher the use of energy the more sophisticated. He proposed this in a paper presented in 1984 entitled, On the Inevitability and the Possible Structures of Civilizations in The Search for extra-terrestrial life: Recent developments. Kardashev stated:

“Since civilizations face always problems that require continuously greater activity, it is likely that super civilizations will undertake activities and construct structures of a very large scale. Properties and means of detections of such superstructures and activities are discussed”

According to this model we are a type 0 organization not even to Type 1 yet. Once the technological singularity arrives we would achieve quickly type 1 status.

Many believe that the idea of technological singularity began with Irving John Good. He was a consultant to Stanley Kubrick, the director of the film 2001: A Space Odyssey on the topic of supercomputers, specifically the Hal 9000. Good was involved in the decryption project in Bletchley Park with legendary Alan Turing during World War II.

In 1965, Good wrote an article for the magazine New Scientist, entitled, Speculations Concerning the First Ultraintelligent Machine. In that article he made this statement,

“Let an ultraintelligent machine be defined as a machine that can far surpass all the intellectual activities of any man however clever. Since the design of machines is one of these intellectual activities, an ultraintelligent machine could design even better machines; there would then unquestionably be an 'intelligence explosion,' and the intelligence of man would be left far behind. Thus the first ultraintelligent machine is the last invention that man need ever make.”

But there are earlier exponents of this view. Robert Thornton a religious writer in Michigan, published a newspaper The Primitive Expounder which like many others of the time in America, discussed modern developments and interpreted them through the Bible, wrote concerning the newly invented mechanical calculator,

“...such machines, by which the scholar may, by turning a crank, grind out the solution of a problem without the fatigue of mental application, would by its introduction into schools, do incalculable injury. But who knows that such machines when brought to greater perfection, may not think of a plan to remedy all their own defects and then grind out ideas beyond the ken of mortal mind!”

In 1958, Stanislaw Ulam described a conversation with John von Neumann, a world renowned mathematician, responsible for pivotal work in set theory, functional analysis, quantum mechanics,
ergodic theory, continuous geometry, economics, game theory, computer science, numerical analysis, hydrodynamics and statistics.

“One conversation centered on the ever accelerating progress of technology and changes in the mode of human life, which gives the appearance of approaching some essential singularity in the history of the race beyond which human affairs, as we know them, could not continue.” 17

The idea was further developed by Vernor Vinge who in the 1983 issue of Omni Magazine, who actually used the term singularity in regards to intelligent machines when he wrote,

“We will soon create intelligences greater than our own. When this happens, human history will have reached a kind of singularity, an intellectual transition as impenetrable as the knotted space-time and the center of a black hole, and the world will pass far beyond our understanding. This singularity, I believe, already haunts a number of science-fiction writers. It makes realistic extrapolation to an interstellar future impossible. To write a story set more than a century hence, one needs a nuclear war in between ... so that the world remains intelligible.” 18

Vinge went on to write an article in 1993 entitled, The Coming Technological Singularity in which he concluded,

“Which is the valid viewpoint? In fact, I think the new era is simply too different to fit into the classical frame of good and evil. That frame is based on the idea of isolated, immutable minds connected by tenuous, low-bandwidth links. But the post-Singularity world _does_ fit with the larger tradition of change and cooperation that started long ago (perhaps even before the rise of biological life). I think there _are_ notions of ethics that would apply in such an era. Research into IA and high-bandwidth communications should improve this understanding. I see just the glimmerings of this now, in Good's Meta-Golden Rule, perhaps in rules for distinguishing self from others on the basis of bandwidth of connection. And while mind and self will be vastly more labile than in the past, much of what we value (knowledge, memory, thought) need never be lost. I think Freeman Dyson has it right when he says: “God is what mind becomes when it has passed beyond the scale of our comprehension.” 19

There are critics who do not believe that an age of technological singularity will arrive or materialize. Some of these are famous people in the field of technology and artificial intelligence. Names such as Marvin Minsky, Gordon Moore, and Steven Pinker can be found in this list.

Steven Pinker a well known author and thinker as well as professor of psychology at Harvard University is skeptical stating,

“There is not the slightest reason to believe in a coming singularity. The fact that you can visualize a future in your imagination is not evidence that it is likely or even possible. Look at domed cities, jet-pack commuting, underwater cities, mile-high buildings, and nuclear-powered automobiles—all staples of futuristic fantasies when I was a child that have never arrived. Sheer processing power is not a pixie dust that magically solves all your problems.” 20

Gordon Moore, co-founder of Intel, also agrees with Pinker when he said,

“I am a skeptic. I don't believe this kind of thing is likely to happen, at least for a long time. And I don't know why I feel that way. The development of humans, what evolution has come up with, involves a lot more than just the intellectual capability. You can manipulate your fingers and other parts of your body. I don't see how machines are going to overcome that overall gap, to reach that level of complexity, even if we get them so they're intellectually more capable than humans.” 21

Douglas Hofstadter director of the Center for Research on Concepts and Cognition at Indiana University states,

“It might happen someday, but I think life and intelligence are far more complex than the current singularitarians seem to believe, so I doubt it will happen in the next couple of centuries. [The ramifications] will be enormous, since the highest form of sentient beings on the planet will no longer be human. Perhaps these machines--our 'children'--will be vaguely like us and will have culture similar to ours, but most likely not. In that case, we humans may well go the way of the dinosaurs.” 21

PARATECHNOLOGY
Esther Dyson, an investor and evangelist for emerging technologies also echoes this skepticism of technological singularity when she says,

“The singularity I'm interested in will come from biology rather than machines. We won't be building things; we'll be growing and cultivating them, and then they will grow on their own.”  

Kevin Kelly, a brilliant writer and former editor of Wired Magazine as well as an author, critiqued Singularity as championed by Kurzweil in 2006 in a post in his blog The Technium. Kelly, wrongly attributes the idea to Vinge. Perhaps he was thinking of the source from which Kurzweil incorporated the idea into his thoughts. Although very respectful of Kurzweil's achievements, Kelly is skeptical. He thinks many assumptions are made by Kurzweil which are not directly connected to artificial intelligence reaching the sophistication and power of the human mind. Kelly believes that there have been many singularities in history and that some are occurring now. He thinks all these singularities have been imperceptible and continuous.

“As the next level of organization kicks in, the current level is incapable of perceiving the new level, because that perception must take place at the new level. From within our emerging global cultural, the coming phase shift to another level is real, but it will be imperceptible to us during the transition. Sure, things will speed up, but that will only hide the real change, which is a change in the rules of the game. Therefore we can expect in the next hundred years that life will appear to be ordinary and not discontinuous, certainly not cataclysmic, all the while something new gathers, until slowly we recognize that we have acquired the tools to perceive that new tools are present - and have been for a while.”

He continues about the coming singularity,

“In a thousand years from now, all the 11-dimensional charts at that time will show that "the singularity is near." Immortal beings and global consciousness and everything else we hope for in the future may be real and present but still, a linear-log curve in 3006 will show that a singularity approaches. The singularity is not a discreet event. It's a continuum woven into the very warp of extropic systems. It is a traveling miracle that moves along with us, as life and the technium accelerate their evolution.”

Because it is difficult, if not impossible, to accurately predict how strong artificial intelligence will actually affect the world, it is unclear whether humans will be viewed by the unnatural life forms as serving a purpose in a world dominated by super-intelligent machines or whether they will be weighed as lacking any practical function and therefore be considered expendable. It could be that we won't even see the question coming. In other words, we may already be in the process of being lulled into subservience toward the rise of the machines. As the brilliantly insane Theodore Kaczynski, in his thirty-five-thousand-word paper, “Industrial Society and Its Future” (also called the “Unabomber Manifesto”), wrote:

“As society and the problems that face it become more and more complex and machines become more and more intelligent, people will let machines make more of their decisions for them, simply because machine-made decisions will bring better result than man-made ones. Eventually a stage may be reached at which the decisions necessary to keep the system running will be so complex that human beings will be incapable of making them intelligently. At that stage, the machines will be in effective control. People won’t be able to just turn the machines off, because they will be so dependent on them that turning them off would amount to suicide.”

Crazy or not, Kaczynski may be right in that man’s demise at the hands of machines will happen gradually, during which time we humans will become the proverbial frogs in the kettle set to boil. On the other hand, we are more likely to be reduced any day now in the blink of an enhanced eye to the status of domestic animals in the minds of artificial intelligence, as Technological Singularity that magical future moment that many futurists and tech experts believe could be imminent gives birth overnight to some version of the artilects, who suddenly come online as conscious, living super-minds, immensely more powerful than human beings.
The key idea underlying the impending Singularity is that the rate of change of our human-created technology is accelerating and its powers are expanding at an exponential pace. Exponential growth is deceptive. It starts out almost imperceptibly and then explodes with unexpected fury.

Kurzweil elaborates further on what the Singularity will mean:

“Our version 1.0 biological bodies are frail and subject to a myriad of failure modes. The Singularity will allow us to transcend these limitations. We will gain power over our fates. Our mortality will be in our own hands [and] the nonbiological portion of our intelligence will be trillions of trillions of times more powerful than unaided human intelligence.”

The Singularity will represent the culmination of the merger of our biological thinking and existence with our technology, resulting in a world that transcends our biological roots. There will be no distinction, post-Singularity, between human and machine.

The Singularity represents an "event horizon" in the predictability of human technological development past which present models of the future may cease to give reliable answers, following the creation of strong AI or the enhancement of human intelligence.

A number of noted scientists and technologists have predicted that after the Singularity, humans as we exist presently will no longer be driving technological progress, with models of change based on past trends in human behavior becoming obsolete.
10. SINGULARITY AND THE IMAGE OF THE BEAST

Revelation 13:15

*And he had power to give life unto the image of the beast, that the image of the beast should both speak, and cause that as many as would not worship the image of the beast should be killed.*

The Forbidden Planet was the first of the modern science fiction movies. It was a breakthrough in technology and a prototype for the science fiction of today. The movie was so good and advanced in its thinking that it fits right in with today's science fiction. This movie was a classic and set the standard.

The movie ends with Dr. Morbius throwing himself in front of this monster from his id, which is himself. He dies along with the force. Dr. Morbius’s death saves the rest of the expedition. This movie is loaded with technology and action. It definitely was way ahead of its time. There are three concepts which stand out in this movie that have importance for today.

1. There is Roby a robot that interacts with humans and operates with artificial intelligence. It is like the robot C-3PO of Star Wars.

2. Dr. Morbius is able to interact with the Krell electronics to greatly boost his intellect. This represents the merging of biology and machines.

3. Man's technology can go beyond man to destroy him. (In this case, it was the Krell's technology but the principle is the same.)

Many of the great science fiction movies that followed built on this foundation. Let us examine a few to show how these themes are developed.

**In Star Trek: The Next Generation series,** there was the android Data. He was actually modeled after Roby from The Forbidden Planet. Data looks human, but he is completely mechanical.

The major nemesis of this Star Trek series is cyborgs (an organism that has both artificial and natural systems) called the Borg. A Borg drone is created by the merging of the biological with mechanical parts.

A drone has one eye replaced with a mechanical ocular implant. They have one arm replaced with a multi-purpose tool. These are beings that function as part biological and part mechanical.

The idea of a cyborg was fully developed as far back as the early 1970s with both the movie and TV series the Six Million Dollar Man, along with the female counterpart show, The Bionic Woman. In the Six Million Dollar Man, the hero is severely injured in a crash. The show begins with the phrase: "We can rebuild him: We have the technology." He is then "rebuilt" by having his right arm, both legs and the left eye replaced with bionic implants; thus he has greatly enhanced strength, speed and vision far above human natural ability. He now can run 60 miles per hour while his eye has a 20:1 zoom lens with infrared capabilities.

**The movie Terminator 2: Judgment Day** fully develops the idea of androids so far technologically advanced, that they have destroyed the human race. The androids with artificial intelligence have taken over the world. The Terminator is an android that completely interacts with humans and looks and acts human. In this film, man has created beings that can think and operate as a human.

**In the Matrix** intelligent machines that man created have conquered mankind. They use the heat from human bodies to survive. To harness the heat, the machines keep the human minds connected to a matrix where the machines control reality. A connection is placed in the back of the human skull by the machines and then the brain is wired to a computer which creates the matrix. This is the complete
merging of the brain with a computer. Thoughts and knowledge can be downloaded directly into the brain and become part of the thought pattern.

These movies are more than science fiction. I believe there is a prophetic element to them. The ideas that were first introduced in The Forbidden Planet can become a reality in our lifetime. This type of science fiction has been preparing the public to accept artificial intelligence as a form of life. The merging of humans with machines is a theme which the public is now familiar. Technological concepts that were unimaginable before WW II are now very familiar with the public. What was pure science fiction in 1956 is becoming reality in the Twenty-first Century.

Man has the ability to create whatever he can think or imagine. This is because mankind is made in God's image. The ability through science fiction to imagine artificial life, or as we call it today "artificial intelligence," means that it is possible to create such life. The idea of creating a cyborg by merging the human body with mechanical devices means that one day it could be accomplished. This idea of man creating what he can imagine is supported by the Bible.

Genesis 11:6 And the LORD said, Behold, the people is one, and they have all one language; and this they begin to do: and now nothing will be restrained from them, which they have imagined to do.

The Hebrew word for imagine is very interesting. It means to give thought and involves planning. It involves thought with focus. In addition to imagine, this word is also translated: consider, devise, plot, purpose, and think (evil). This concept means that if man focuses on an idea, he can bring it to reality.

If man imagines merging his brain with a computer and creating a cyborg, it can be done. I am sure that man is limited to working within the physical laws that God created. But, within this framework if man thinks of something, with time, effort and advanced technology, it will come to pass. The Forbidden Planet is the perfect example. Man thought of a robot that could interact with humans and today we are in the early stages of developing artificial intelligence along with advanced robots. Man is a long way down the road to interfacing the brain with computers. All this took less than 60 years!

The purpose of this section is to give you an understanding of Singularity in relation to Bible prophecy so you can see what is the conclusion of Singularity..

The concept of Singularity and its exact definition are somewhat elusive, but in simple terms it means that man and machines have become interchangeable. Thus, when the biological and technical have merged, then Singularity will have been achieved. It is a word that few have heard or understand, but mankind is now in a technological explosion that is directly leading to Singularity. The science fiction that started in the 1950s has slowly become a reality. Roby the robot and the machine that vastly increased Dr. Morbius's intelligence are now coming into focus as reality. Singularity is no longer science fiction: it is reality.

Entire fields of science are now racing towards achieving Singularity. Old science such as physics and biology are involved, but entire new fields of science are being created that deal with advancing Singularity. These new fields include: synthetic biology, biocomputing, biotechnology, nanotechnology, neuroprosthetics, and biomedical engineering. There are now breakthroughs towards Singularity nearly every day. In most cases, the scientists have no idea that science is racing to create Singularity. In some cases, the scientists are well aware of what they are doing and are directing all their energy to create Singularity. What can appear to be fractured advancements are really just parts of a puzzle coming together. As Singularity gets closer, there will be direct cooperation with all scientific disciplines to bring it to completion. Ultimately, the objective of this explosion in technology will be to bring Singularity to pass.

There is a spiritual aspect to Singularity that is part of Bible prophecy that must come to pass. Man is racing toward a scientific conclusion and many have no idea that they are working to bring this about.
When mankind reaches Singularity it will result in an incredible confrontation between man and God. This confrontation along with Bible prophecy will be fully later.

There is an information lag between the advancement of science and knowledge reaching the public. For example, the concept of the Internet was known in scientific circles for many years before it reached the public. Today the Internet and all the technology surrounding it is used everyday by huge numbers of the public. The scientists were working on cloning long before the first sheep was cloned.

The same concept holds true with Singularity as it is taking place "under the radar." Mankind is a long way down the road to accomplishing it, yet the general public has little knowledge of what is happening. Humans are being blended with machines. Many of the ways are beneficial and therefore, are protected from criticism. Who can question an artificial eye for the blind, or a microchip implanted into the brain to help a quadriplegic? If science is cloaked in health or medicine for alleviating human suffering, it is virtually impossible to question the application of this technology. It is not that many of these advancements are evil, but in the end, the blending of human biology with mechanical technology will be used for evil.

When you study Singularity, it became apparent that most of the breakthroughs occurred in the last few years. It seems that starting in 2007, the technology greatly accelerated. The Futurists/scientists who predict the progress of Singularity claim the great technological breakthrough will occur between 2009 and 2019. Mankind may very well be on the verge of a huge breakthrough in technology that will be altering current reality.

The accelerating scientific knowledge that advances Singularity is increasing exponentially. This means that rate of knowledge is exploding and right now knowledge has reached the point where mankind is on the verge of making science fiction, reality. At the present rate of exponential growth of knowledge, the next 100 years of progress will accelerate to be like 20,000 years. This is why Futurists think the 10 year window between 2009 and 2019 is so critical. The two key concepts to follow toward Singularity are the merging of the human body with mechanical technology and the creation of artificial intelligence. The following is a partial list of scientific achievements showing these concepts are getting very close to fulfillment.

"Devices known as brain-machine interfaces could someday be used routinely to help paralyzed patients and amputees control prosthetic limbs with just their thoughts. Now, University of Florida researchers have taken the concept a step further, devising a way for computerized devices not only to translate brain signals into movement but also to evolve with the brain as it learns."

"At the moment, the thought helmet concept consists of 128 sensors buried in a soldier's helmet. Soldiers would need to think in clear, formulaic ways, which is similar to how they are already trained to talk. The key challenge to making the system work is a software system that can read an electroencephalogram (EEG) generated by the sensor data, and pick out when a soldier is thinking words, and what those words are."

"Metal electrodes are increasingly being used in brain implants that help treat depression and the tremors of Parkinson's disease, and in ever more sophisticated prosthetic devices."

"For many blind or partially sighted people, implants that stimulate healthy nerve cells connected to their retinas could help restore some normal vision. Researchers have been working on such implants since the 1980s but with only limited success. A major hurdle is making an implant that can stay in the eye for years without declining in
performance or causing inflammation. Now researchers have developed hardware they say overcomes such issues. The implants have been tested in animals, and the group plans to start human trials by 2010."

"Imagine a chip, strategically placed in the brain, that could prevent epileptic seizures or allow someone who has lost a limb to control an artificial arm just by thinking about it."

"The central feature of the proposed interface is the ability to create transplantable living nervous tissue already coupled to electrodes. Like an extension cord, of sorts, the non-electrode end of the lab-grown nervous tissue could integrate with a patient's nerve, relaying the signals to and from the electrode side, in turn connected to an electronic device."

"Until now, brain-machine interfaces have been designed as one-way conversations between the brain and a computer, with the brain doing all the talking and the computer following commands. The system UF engineers created actually allows the computer to have a say in that conversation, too. In the grand scheme of brain-machine interfaces, this is a complete paradigm change. This idea opens up all kinds of possibilities for how we interact with devices. It's not just about giving instructions but about those devices assisting us in a common goal. You know the goal, the computer knows the goal and you work together to solve the task."

"According to Bostrom, anticipate a coming era where biotechnology, molecular nanotechnologies, artificial intelligence and other new types of cognitive tools will be used to amplify our intellectual capacity, improve our physical capabilities and even enhance our emotional well-being."

"The computer that haunts Martyn Amos's dreams literally comes to life when he switches it on. With the potential of awesome computing power it bears little resemblance to a conventional machine. Where you might expect silicon chips to lurk is a noodle soup of cells, chemicals and DNA strands. And to keep it going, Amos has to ensure it is supplied with nutrients, not electricity. For the computer of the future will not be a mass of inert circuitry. It will be alive."

"One of Brooks of his longtime goals has been to create a robot so "alive" that you feel bad about switching it off. Brooks pioneered the movement that teaching robots how to "learn" was more sensible that trying to program them to automatically do complex things, such as walk. Brooks work has evolved around artificial intelligence systems that learn to do things in a "natural" process like a human baby does. This approach has come to be known as embodied intelligence."

"Each human cell already has all of the tools required to build these biocomputers on its own. All that must be provided is a genetic blueprint of the machine and our own biology will do the rest. Your cells will literally build these biocomputers for you."

"Engineers built humanoid robots that can recognize objects by color by processing information from a camera mounted on the robot's head. The robots are programmed to play soccer, with the intention of creating a team of fully autonomous humanoid robots able to compete against a championship human team by 2050. They have also designed tiny robots to mimic the communicative "waggle dance" of bees. A world of robots may seem like something out of a movie, but it could be closer to reality than you think. Engineers have created robotic soccer players, bees and even a spider that will send chills up your spine just like the real thing. They're big ... they're strong ... they're fast! Your favorite big screen robots may become a reality."

"Movies portray robots that can move through the world as easily as humans, and use their hands to operate everything from dishwashers to computers with ease. But in reality, the creation of robots with these skills remains a major challenge. Researchers at the University of Massachusetts Amherst are solving this problem by giving a mobile robotic arm the ability to "see" its environment through a digital camera."

"A large portion of Sandia's program today focuses on the uniqueness of the individual interacting with others and with machines. It involves using machines to help humans perform more efficiently and embedding cognitive models in machines so they interact with users more like people interact with one another. The result is the ability for researchers to take advantage of the basic strengths of humans and machines while mitigating the weaknesses of each."
The scientists are racing to create what they call a transhuman being! Transhuman is the result of achieving Singularity. This being is far superior in intelligence to "normal" humans. The transhumans will have either intelligence amplification or artificial intelligence. There will be direct brain to computer interface and possible mind transfer. This means all the thoughts and emotions in a person's mind could be downloaded into a computer and stored or transferred to another location. This concept of mind transfer is very important for understanding what the Bible describes as The Image of the Beast.

The entire move toward Singularity is an attack on the integrity of mankind. The humanity of man is under attack as man is being transformed from flesh and blood into a mechanical being. The promoters of transhumanism justify this blurring as the advancement of evolution. When reading their writings and the justification of this horror, often the underlying support is the advancement of evolution. Some actually write that Singularity is speeding up evolution. The idea that man somehow would naturally evolve into a machine over a million year time period is beyond ridiculous. These scientists believe that man has evolved beyond evolution and now can control the direction of the evolutionary process.

They look at the biological human as bound in a frail limited body that through the process of evolution can advance into a new species, a Cyber Sapiens! The evolution of technology is just the continuation of biological evolution. This idea of technological evolution as a natural process is not being promoted by kooks, but by many leaders of these scientific fields. This is not coming from some fringe element, but from the leading centers of science from all over the world! The following are two articles which capture the evolutionary thinking behind Singularity:

"Our current situation is unlike anything nature has seen before because we are not simply a by-product of evolution, we are ourselves now an agent of evolution. We are this animal, filled with ancient emotions and needs, amplified by our intellects and a conscious mind, embarking on a new century where we are creating fresh tools and technologies so rapidly that we are struggling to keep pace with the very changes we are bringing to the table."

"According to Hans Moravec, pioneer in mobile robot researcher and founder of Carnegie Mellon University's Robotics Institute, our robot creations are evolving similar to how life on Earth evolved, only at warp speed. By his calculations, by mid-century no human task, physical or intellectual, will be beyond the scope of robots. Moravec says, "I see a strong parallel between the evolution of robot intelligence and the biological intelligence that preceded it. The largest nervous systems doubled in size about every fifteen million years since the Cambrian explosion 550 million years ago. Robot controllers double in complexity (processing power) every year or two. They are now barely at the lower range of vertebrate complexity, but should catch up with us within a half century." On the other hand, others believe that it is humans who will evolve into advanced "robots". Their belief is that with futuristic technologies being developed in multiple fields, human intelligence may eventually be able to "escape its enslavement in biological tissue" and be able to move freely across boundaries that can't support flesh and blood—while still retaining our identities."

What is so foolish in all this thinking is that technological evolution is not happening randomly, but it is being guided by an intelligent being: Man! Only someone who is self deceived could think that the development of a transhuman is happening by evolution. Singularity is being accomplished by an intelligent being applying knowledge. It appears that the promoters of Singularity have committed intellectual suicide to advance their agenda based on some process of evolution. It is obvious that the
architects of Singularity have brilliant minds with vast amounts of knowledge, but they are devoid of understanding and the ability to reason.

An interesting article appeared on the internet about how federally funded research at the University of Illinois has produced a microchip that can be put on skin like a temporary tattoo and is successful in linking the physical world and the cyberworld in stunning new ways, according to a university announcement.

"We think this could be an important conceptual advance in wearable electronics, to achieve something that is almost unnoticeable to the wearer," said university electrical and computer engineering professor Todd Coleman. Coleman helped lead the multi-disciplinary team that worked on the project that is being touted for its uses in medical monitoring as well as treatment of disorders that require links to computers.

The researchers found that, when applied to the skin of the throat, the sensors could distinguish muscle movement for simple speech," the university report said. The researchers have even used the electronic patches to control a video game, demonstrating the potential for human-computer interfacing.

Coleman said the technology "can connect you to the physical world and the cyberworld in a very natural way that feels very comfortable."

According to the University of Illinois, "Skin-mounted electronics have many biomedical applications, including EEG and EMG sensors to monitor nerve and muscle activity. One major advantage of skin-like circuits is that they don’t require conductive gel, tape, skin-penetrating pins or bulky wires, which can be uncomfortable for the user and limit coupling efficiency. They are much more comfortable and less cumbersome than traditional electrodes and give the wearers complete freedom of movement."

The report said the technology will allow a more accurate understanding of how the human brain functions.

"If we want to understand brain function in a natural environment, that's completely incompatible with EEG studies in a laboratory," said Coleman, who has since moved to the University of California at San Diego. "The best way to do this is to record neural signals in natural settings, with devices that are invisible to the user."

The report said the skin-mounted electronics also could be used for patients with neurological disorders, connecting them to computers. The new product is a circuit that bends, wrinkles and stretches with the skin, yet maintains the full functions of the sensors, LEDs, transistors, radio frequency capacitors, antennas and other components.

"We threw everything in our bag of tricks onto that platform, and then added a few other new ideas on top of those, to show that we could make it work," Rogers said in the university report. The chips are applied in a method similar to affixing a temporary tattoo.

Rogers collaborated with Northwestern University engineering professor Yonggang Huang to develop what they call filamentary serpentine, in which circuits are made up of squiggled wires. The circuits are mounted on a flexible surface.

"The blurring of electronics and biology is really the key point here," Huang said in the report. "All established forms of electronics are hard, rigid. Biology is soft, elastic. It's two different worlds. This is a way to truly integrate them."
The scientists’ next goals, they said, are to integrate various electronics into a system and add Wi-Fi capability.

“The vision is to exploit these concepts in systems that have self-contained, integrated functionality, perhaps ultimately working in a therapeutic fashion with closed feedback control based on integrated sensors, in a coordinated manner with the body itself,” Rogers said.

This delusion on the part of huge numbers of people is going to lead them into a direct confrontation with the Creator. A side issue with Singularity is the striving to create immortality. Many adherents see this as a way to avoid death. When Singularity is reached, they believe all of a person's thoughts and emotions can be stored or transferred into a cyborg. A person can now live forever because the mind can be fully preserved and transferred from one location to another. With artificial intelligence one's mind could forever be learning and experiencing emotions. From a materialist's perspective, this achievement represents eternal life.

The following articles show the idea of virtual immortality that Singularity seems to offer:

"The goal is to combine artificial intelligence with the latest advanced graphics and video game-type technology to enable us to create historical archives of people beyond what can be achieved using traditional technologies such as text, audio, and video footage," says Jason Leigh of the University of Chicago's Electronic Visualization Laboratory. The researchers plan on taking the appearance, mannerisms, voice, and even the knowledge of a real person and synthesizing the data into a "virtual person" or avatar. The goal is to create an avatar that will be able to respond to questions and convincingly represent its human counterpart.

The scientists are now wondering if the creation of artificial intelligence in a computer is a form of life. They believe because this form of intelligence can think; therefore, it is a new form of life similar to biological life. These scientists are actually grappling with the concept that they are creating a new form of life. Because artificial intelligence can be programmed for emotions, they believe a new species of life is being formed. Many of the scientists involved with Singularity are obsessed with their achievements and the direction of science.

There is ongoing debate about what constitutes life ... "We're all machines," says Rodney Brooks author of "Flesh and Machines," and former director of M.I.T.'s Computer Science and Artificial Intelligence Laboratory,

"Robots are made of different sorts of components than we are. We are made of biomaterials; they are silicon and steel, but in principle, even human emotions are mechanistic." A robot's level of a feeling like sadness could be set as a number in computer code ... Why should a robot's numbers be any less authentic than a human's? 34

One of Brooks of his long time goals has been to create a robot so "alive" that you feel bad about switching it off. Brooks pioneered the movement that teaching robots how to "learn" was more sensible that trying to program them to automatically do complex things, such as walk. Brooks work has evolved around artificial intelligence systems that learn to do things in a "natural" process like a human baby does. This approach has come to be known as embodied intelligence."

Genesis 1:27 So God created man in his own image, in the image of God created he him; male and female created he them.

This tremendous explosion in knowledge is leading to a direct confrontation with the Creator, the holy God of Israel. God created man is His likeness or image, hence a representative figure. The Bible makes it clear that God does not have a flesh and blood body, but the way man was created makes him in the likeness of God. Singularity alters man's likeness to God, and thus man is no longer in the image of God.
Tampering with man’s integrity is very serious business with God. It appears from Bible prophecy that man will reach Singularity just prior to the Second Coming of the Lord Jesus. This is found in Revelation 13, one of the most famous chapters in the Bible. This chapter reveals two infamous men referred to as Beasts. They are called beasts because of their inner character and the havoc they bring to mankind. The first Beast is commonly known as the Anti-Christ (See 1John 2:18) while the second is commonly known as the False Prophet (See Revelation 19:20.) These two appear on the world stage as both political and military leaders. The entire world is going to follow after them, and all the world is going to come under their control.

During the time of their rule, the False Prophet directs the entire world to create The Image of the Beast, or as he is now known as the Anti-Christ. Notice the entire world is involved in this project. This Image is a creation of man, and it is the False Prophet who directs this project and gives life to The Image. This verse follows:

Revelation 13:14 “And deceiveth them that dwell on the earth by the means of those miracles which he had power to do in the sight of the beast (Anti-Christ); saying to them that dwell on the earth, that they should make an image to the beast ... (15) And he (False Prophet) had power to give life unto the image of the beast, that the image of the beast should both speak ...”

The Greek word translated image means: a likeness, and literally a statue, or figuratively a representation, resemblance. This is identical to the Hebrew word used for man being created in God's image. The past commentators of the Bible had no idea what was "The Image of the Beast." Many just thought it was a statue that miraculously came to life. It was impossible for anyone, other than during the time we live, to understand that The Image of the Beast is a prototype of Singularity. Man is now a creator of "life."

From Revelation 13, it appears that the False Prophet is involved with science and directs a world involvement to create The Image. He is evidently an evolutionist who is aware of Singularity and uses the resources of all the scientists and research centers to bring it to pass. In the near future, there will be a breakthrough in knowledge which enables the creation the first transhuman. The False Prophet is able to harness all the resources needed to successfully produce the first prototype! Man has reached Singularity.

When the prototype is completed, the False Prophet is the one who brings The Image to life. This is why I think he has a tremendous scientific background. Creating The Image is his idea from start to finish. He is aware of Singularity, and he knows how to direct the merging of man and machine. The Image is manmade, but it has life and the technology to speak. The Bible states that The Image will be alive. This...
creates interesting speculation on what exactly is The Image. Because it is alive, I believe it will be part human and thus a cyborg. The human part could be the brain.

Currently, scientists have used nerve cells from rat fetuses to create a computer type brain that can think. The nerve cells are coupled to electrodes and these primitive brains can move mechanical arms. It is very possible that The Image's brain could come from the nerve cells of aborted babies merged with a computer. Then the thoughts and emotions of the Anti-Christ could be down loaded into this brain: thus, you have The Image of the Beast. It will be an exact likeness of the Anti-Christ in its thinking.

I doubt that The Image will have a body like a human although it is possible. I do not think it will resemble Data of Star Trek. The Image will most likely look crude as it is the prototype. It is the thinking process that will be at the heart of The Image. The technology to complete this has not been reached, but in the near future there will be astonishing breakthroughs to allow it. Man is heading in this direction. I am just speculating on how The Image will be built. There could be another way, but a cyborg that is part human seems logical. In time, the exact path will be known, so now one can just speculate. It will be very interesting to watch man moving toward Singularity.

One thing is for sure, that man is on a course to create the being described in Revelation 13:14 and the technology to complete it is coming on line. The Bible reveals that God does not recognize The Image as a human being. Whatever is created by man, and although it has some form of life, it is not recognized by God as human. This can be seen at the Second Coming of Jesus Christ.

The Bible describes the return Jesus Christ in Revelation 19. When Jesus Christ returns it will be during the battle of Armageddon. The Lord Jesus is going to annihilate the Beast (Anti-Christ) and the False Prophet and cast them both alive into hell. The Bible mentions that they created The Image, but it is not cast into hell. There is no more mention of it. The Image just disappears from the Bible. The verse to show this follows:

Revelation 19:20 "And the beast was taken, and with him the false prophet that wrought miracles before him, with which he deceived them that had received the mark of the beast, and them that worshipped his image. These both were cast alive into a lake of fire burning with brimstone."

From the direction that science is now taking and what Bible prophecy states is going to happen, there are several conclusions that one can make. There are going to be incredible breakthroughs in science that are going to astound the world. In the near future, everyone is going to know about Singularity. The belief in evolution is going to gain more and more control over people's thinking. The God of the Bible is going to be rejected as Creator by vast numbers or people. In the mind of these people, there is no longer any need for God.

When man creates The Image, it is not just for a scientific accomplishment. There is a sinister evil motive behind it. The goal is to show that man is the now the creator. There is a new leap in evolution. Man can achieve eternal life on this own. God is out of the picture, and man is now the creator. Man can have eternal life without the Creator! This attempt for eternal life is pitiful: a cyborg!

The False Prophet takes the creation of The Image into the spiritual realm. He demands that everyone on earth worship The Image and the Anti-Christ. This is man worshipping himself. It is a way to determining who is not a believer in the Anti-Christ and evolution. Those who do not participate in worshipping The Image will be killed:

Revelation 13:15 "And he had power to give life unto the image of the beast, that the image of the beast should both speak, and cause that as many as would not worship the image of the beast should be killed."

The Bible issues stern warnings about worshipping The Image; it is strictly forbidden. All that submit and worship the Anti-Christ and his Image are eternally separated from the true Creator. Modern science,
which is based on evolution, will merge into a religion that worships a man and his creation. It is pure idolatry at its core. They worship a man and his cyborg as if they were God.

The Bible warns that those who worship The Image will suffer judgment on earth. A grievous sore will break out upon them and they will greatly suffer.

Revelation 16:2 "... there fell a noisome and grievous sore upon the men which had the mark of the beast, and upon them which worshipped his image."

Upon death, those that worshipped The Image will suffer eternal torment. They will be separated from their true Creator forever. What a terrible insult to the real Creator, to have His creation reject Him and worship a cyborg. God's warning is absolutely clear to those who reject Him and worship a man and his cyborg:

Revelation 14:9 "And the third angel followed them, saying with a loud voice, If any man worship the beast and his image ... (10) The same shall drink of the wine of the wrath of God, which is poured out without mixture into the cup of his indignation; and he shall be tormented with fire and brimstone in the presence of the holy angels, and in the presence of the Lamb: (11) And the smoke of their torment ascendeth up for ever and ever: and they have no rest day nor night, who worship the beast and his image ... "

Revelation 20:4 "And I saw thrones, and they sat upon them, and judgment was given unto them: and I saw the souls of them that were beheaded for the witness of Jesus, and for the word of God, and which had not worshipped the beast, neither his image ,"

This entire false religious-scientific system will be destroyed at the Second Coming of Jesus Christ. All the efforts currently being put into Singularity will be destroyed. The tampering with the integrity of God created humanity will come to an end. The false belief in evolution will come to a very abrupt end. The rebellion against the true Creator will cease.

Man's attempt for eternal life through a cyborg or android is pitiful and pathetic. God freely offers eternal life with Him. This offer comes through faith in Jesus Christ as your Savior. Man was created in God's image but sinned and this separated him from His Creator and brought death. Through the death of Jesus Christ and His shed blood for sin, God reversed what man had brought on himself. By faith in Jesus Christ, God will provide a new body that is not fashioned like a cyborg but it is like the resurrected body of Jesus Christ. God promises you and offers to all believers the assurance of eternal life with Him.

John 3:16 "For God so loved the world, that he gave his only begotten Son, that whosoever believeth in him should not perish, but have everlasting life."

The future for those that are trusting Jesus Christ as their Savior and Lord is eternity with the Creator in a body that never grows old and is not subject to disease or death:

1 Corinthians 15:44 "It is sown a natural body; it is raised a spiritual body. There is a natural body, and there is a spiritual body."

Modern man denies sin and that man has a sin nature. If God did not eventually intervene and stop man at the creation of The Image, man would destroy himself like the Krell of The Forbidden Planet. In the movie, the Krell died from "Monster from the id; however, man would destroy himself from the monster of his sin nature. Man has a bent toward sin and evil and only through being born again spiritually through faith in Jesus Christ can this evil sinful nature be broken.

Mankind is racing toward Singularity and the confrontation with the true Creator. Now is time to trust God and turn to Jesus Christ as your Savior and Lord. In the near future, you are going to be forced or coerced to worship The Image under the threat of death. Now is the accepted time: now is the day of salvation.
11. INDIA: TEST CASE FOR THE MARK OF THE BEAST

When dealing with the coming cashless society and the developing technological control grid there is a mountain of evidence written about the surge of government attempts to gain access to and force the use of biometric data for the purposes of identification, tracking, tracing, and surveillance.

Unfortunately, the reactions received from the general public are almost always the same. While some recognize the danger, most simply deny that governments have the capability or even the desire to create a system in which the population is constantly monitored by virtue of their most private and even biological information. Others, either gripped by apathy or ignorance, cannot believe that the gadgets given to them from the massive tech corporations are designed for anything other than their entertainment and enjoyment.

However, current events in India, a country with the world second largest population, should serve not just as a warning, but also as a foreshadowing of the events to come in the Western world, specifically the United States.

Recently, India has launched a nationwide program involving the allocation of a Unique Identification Number (UID) to every single one of its 1.2 billion residents. Each of the numbers will be tied to the biometric data of the recipient using three different forms of information – fingerprints, iris scans, and pictures of the face. All ten digits of the hand will be recorded, and both eyes will be scanned.

The project will be directed by the Unique Identification Authority of India (UIDAI) under the premise of preventing identity theft and social welfare fraud. India has rather extensive social welfare and safety net programs, ranging from medical support and heating assistance to others aimed at helping the poor. Fraud is a rampant problem in India, especially in relation to these programs due to a preponderance of corrupt politicians and bureaucrats who often stuff welfare rolls with fake names and take the money for themselves.

Yet, although the justification for the billion person database is the increased ability to accurately disperse social welfare benefits, it will not be just the Indian government's social welfare programs that have access to and utilize the UIDAI. Indeed, even before the program has been completed, major banks, state/local governments, and other institutions are planning to use the UIDAI for identification verification purposes and, of course, payment and accessibility.

As Aaron Saenz of the Singularity Hub writes: Yet the UID is going to be used for much more than social welfare programs. The UIDAI is in discussion with many institutions (banks, local/state governments, etc.) to allow them to use the UID as a means of identity verification. These institutions will pay the UIDAI some fee to cover costs and generate revenue. There seems to be little doubt that once it is established, the UID will become a preferred method (if not the preferred method) of identification in India.
Saenz also sees the eventuality of the UIDAI program becoming a means of payment and accessibility. He continues:

“Ultimately, I wouldn't be surprised if the UID, with its biometric data, could be used as a means of payment (when linked to a bank account), or as an access key to homes and cars. Purchase a meal with your fingerprint and unlock your door with the twinkle in your eye. Similar results could be expected in other nations that adopted biometric identification systems.”

Saenz, and other proponents of the UID (UIDAI), have been diligent in pointing out that the program “is just a number, not an ID card.” However, this claim is debatable. Saenz himself admits that State issued driver’s licenses and identification cards will reference the UID information.

The question then becomes how much of that information will be referenced, and how that will be accomplished? Will the information be included on the card? Will only part of the information be included on the card? Or will the card reference back to the digital UID information to be then reconciled with the information that is present on the card? Although the UID is obviously going to be utilized by other institutions outside of the social welfare programs, no answers to these questions have been provided.

But, in the end, does it really matter if the information is collated into an ID card format if the government already has access to that information digitally? More than likely, a national ID card will appear as a supplement to the database already created by UID. Regardless, the private biometric information has still been taken from the individual. The database is still there.

Indeed, government “officials” have already stated that the database will be used by intelligence agencies for the purpose of monitoring “bank transactions, cellphone purchases and the movements of individuals and groups suspected of fomenting terrorism.” This will be very easy to do since the UID number will be entered anytime an individual “accesses services from government departments, driver’s license offices and hospitals, as well as insurance, telecom, and banking companies.”

Nevertheless, proponents have also touted the fact that, at this point, the UID program is optional. But the program will obviously not be optional for very long. As I have discussed in previous articles, the introduction of a program such as a national ID card, biometric data, or cashless payment technologies is always followed by the program becoming mandatory. The ultimate goal of an all-encompassing cashless surveillance program with no opt-out provisions is always introduced by stealth and the Gradualist Technique.

At first, the program is introduced as a way to speed up transactions, increase efficiency, and provide convenience. Soon, however, governments and businesses begin to transition out of the older methods of payment and identification and focus more on the new technology. Identification using the traditional methods remain as an option, but become viewed as cumbersome. Eventually, the alternative methods are phased out completely and mandates replace what was once a personal choice.

As soon as Indian banks, businesses, and government social service offices begin to require identification using the UID, the ability to remain off the system and lead what passes for a normal life will disappear.

This is exactly the intention with India’s new biometric ID program. In fact, the cashless society is a stated goal of the UID program. CEO of MindTree’s IT Services, the company that was awarded the government contract for development and maintenance of the UID, explained in an interview with ComputerWeekly that the “ID scheme will support a cashless society. He said all vendors will have a biometric reader and citizens can pay for things with a fingerprint scan. Even a bag of rice.”
No doubt, even after such an admission by a man who was instrumental in the development of the program, many who read this article will still dismiss it as a "conspiracy theory."

Nonetheless, this new monumental data mining effort by the Indian government dovetails with recent efforts in the Western world to develop an electronic surveillance grid capable of tracking, tracing, and recording every single movement and communication of every single citizen within a nation’s borders.

Microsoft Research sees "exciting" opportunities for itself in the Indian government's unique identification project in the areas of user interface, multi-lingual systems, mobility and secure database management. The research arm of Microsoft is in talks with Mr Nandan Nilekani, Chairman of the Unique Identification Authority of India, to explore options. Mr Nilekani hoped that Microsoft Research would work with the government on the research challenges the project would throw up.

Mr Nilekani hoped the creation of a unique number for every Indian citizen would bridge the divide between those with identification proofs (passport, licence etc) and those without any. “The project hopes to create an inclusive society by acknowledging the disadvantaged society, ensuring that they gain access to public services and demand their rights. It will also make sure the benefits of various government initiatives (such as ration, NREGA payments and pension) reaches the right people.” The unique ID could also find application in the areas of financial inclusion and primary healthcare, he added.

New technologies which are being introduced inside the United States, the UK, and Australia such as vein scanners, biometric employee time and attendance systems, voice recognition devices, and behavior analysis systems are all geared toward Total Information Awareness of every human being on the planet.

Only a totalitarian form of government would desire this information; and only a very determined totalitarian government would actively work toward establishing it. India is only the first nation to openly sweep up its entire national population into such a massive biometric database net.
FOOTNOTES

2. http://www.transtopia.net/3Tbasic.html
11. http://www.kurzweilai.net/exploring-the-singularity
12. http://www.guardian.co.uk/uk/2001/sep/02/medicalscience.genetics
15. http://www.singularitysummit.com/summit/what_is_the_singularity