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CRUSADE

A CPG CLARION CALL

FEATURING

YOUNG INDIA



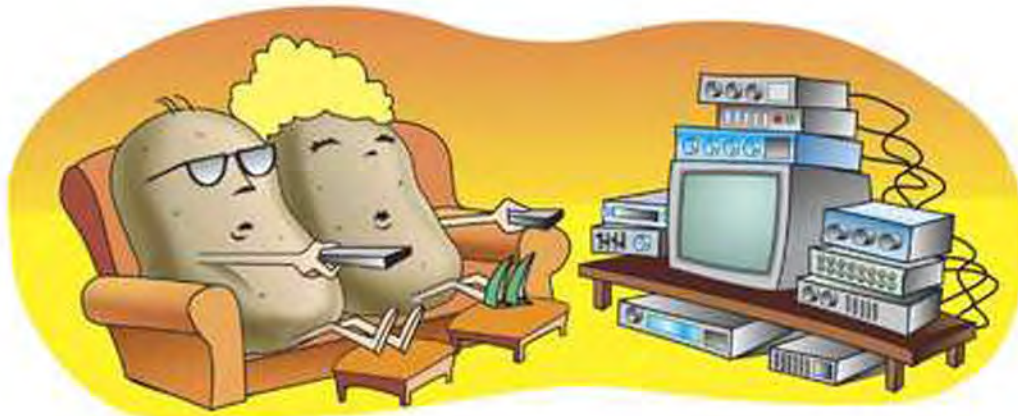
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WISE TALK

DON'T BE A COUCH POTATO



S. MANIKANDAN
III MECH - TVS



YOUNG INDIA

DEVELOPING AND RETAINING GEN Y TALENT

Today, with 65% of its population under the age of 35, India boasts to be one of the youngest and largest available workforce in the world. Among this group, a large segment belongs to gen Y cohort. As the country's development is now in the hands of gen Y cohort, it's really important to develop them in the right path. Due to the existing employment scenario in our country, all potentially skilled citizens of our nation are migrating to foreign companies. The power of youngsters has been witnessed in many protests in India like Jallikattu protest and In the case of Telangana state, Osmania students fought and got their separate state.

The increasing number of factional groups, the unchanged education system, the ever increasing international terrorism, the caste division in the country and the interstate tension have all kept the youngsters at bay while the predators from politics, religion and multinational companies preyed on the poor and the innocent. India has to focus mainly on young talents and should create more opportunities to showcase their talents and skills. The big challenge is that how this cohort would make the transition into workforce and how organizations will develop and engage them to move up and become business leaders.



YOUNG INDIA

DEVELOPING AND RETAINING GEN Y TALENT

So far, Indian youngsters were not given an opportunity to work in the manufacturing sector. They were disappointed by the Engineering illusion that ended up with a call centre jobs or a computer operator job. The change in the system should start from the schools and continue in the colleges where, only students who are interested to study engineering will be part of it. This will enable the college environment to be innovative.

Today's India is no longer the world's back office. The Team lease Indian labor report of 2009 estimated that 300 million people will enter the workforce by 2025 and we will have 25% of world's skilled workforce. The fact is that it is no longer enough for organizations to provide on the job training. Rather, it is important to go into those regions where people haven't had a chance to learn and build skills, and help them earn their livelihoods through basic vocational skill training. Providing people with work skills enables them to earn their livelihood across the country. Large retail organizations like Reliance and Shoppers stop, as well as small players, are supporting these initiatives by providing employment to people who otherwise would have been lost or left out. Thus, the employability in the country could be improved.



India got 'Adaptable' Talent?

YOUNG INDIA

DEVELOPING AND RETAINING GEN Y TALENT

Now, Young India is the destination for many foreign organizations, so Indian companies should increase their chance of success by taking the following steps: Working with the government to reach the semi-rural and rural youth and enhance their employability. Creating an engaged workforce through practices like the use of social media and giving workers the opportunity to continue to hone their skills through "Earn and Learn" programs. Ensure that there is a clear talent management processes to harness the power of youth. Today's Indian workforce is in a perfect place and it has the right mix of all ages. Combining the experience and discipline of GenXers with the maverick and youthful approach of the next generations will help Young India power the country to the top.

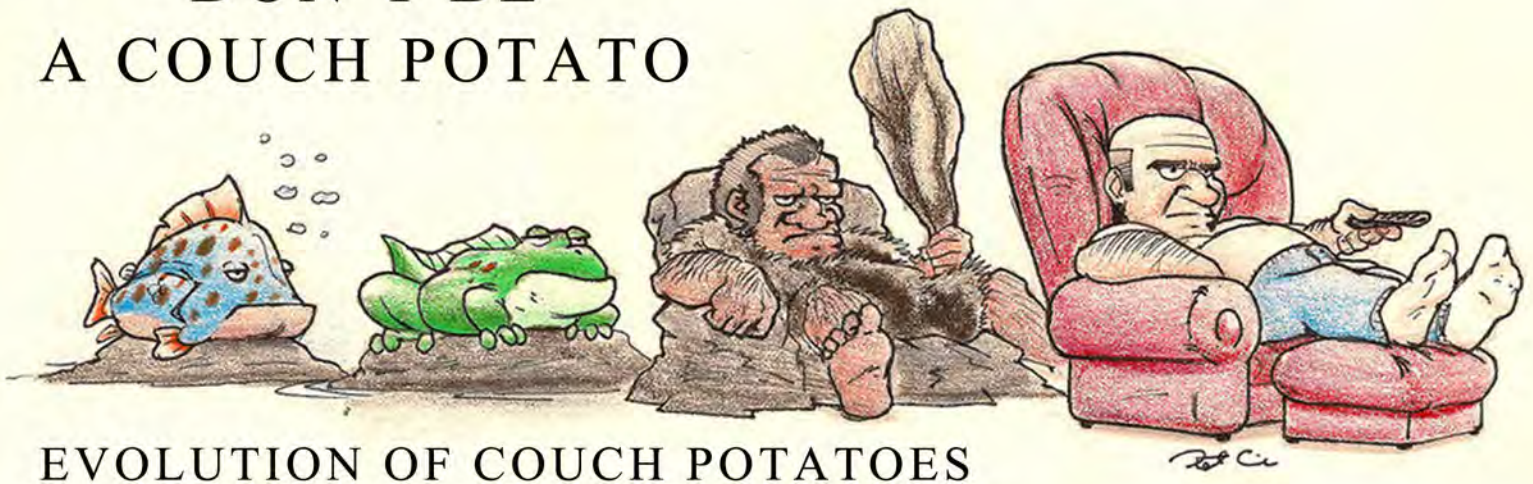
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Meet the young India
Emerging with flying colors
dynamic & versatile in every manner.

Let the world know
We are back with a bang

DON'T BE A COUCH POTATO

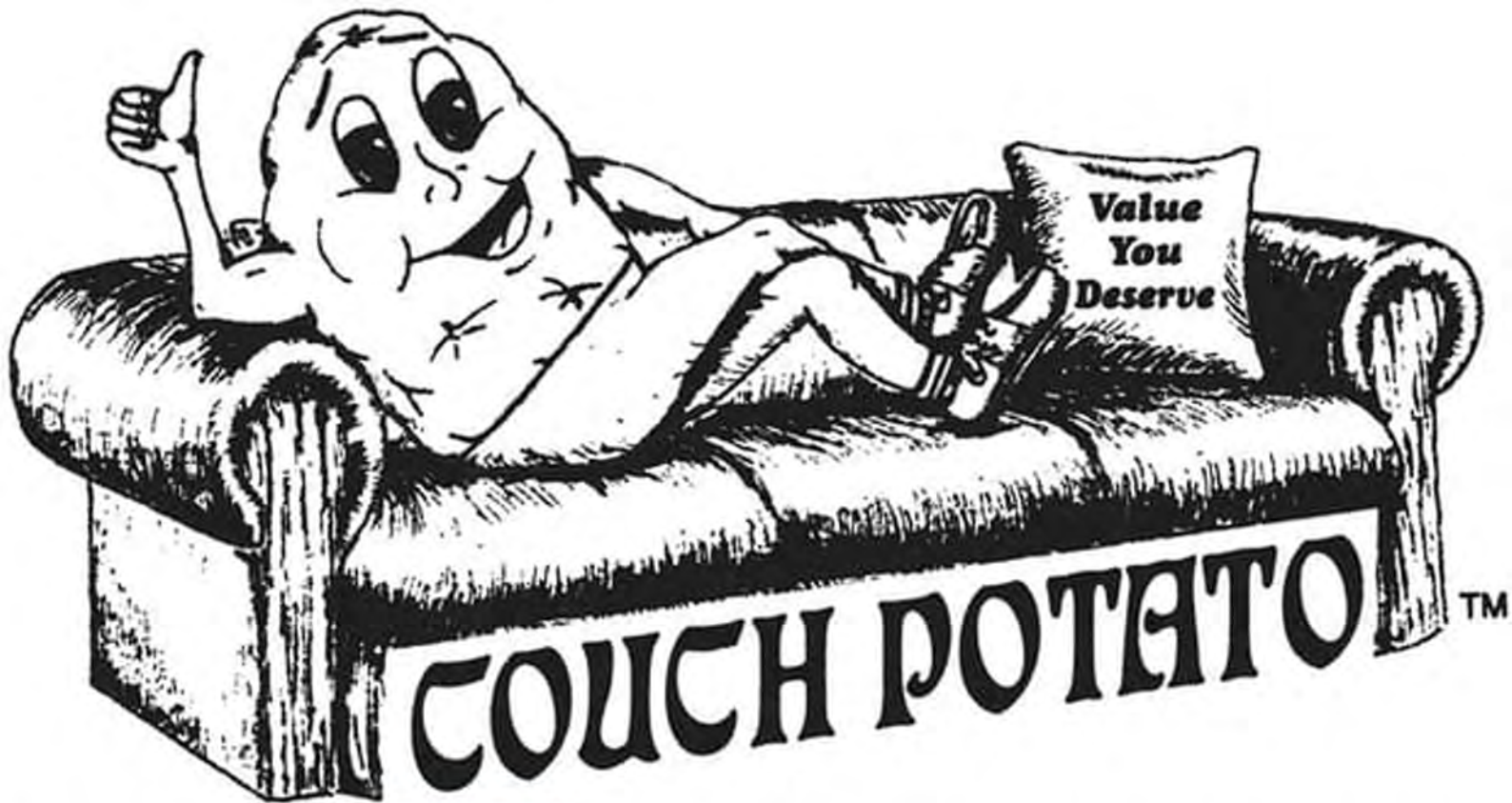


EVOLUTION OF COUCH POTATOES

Sometimes we feel good to lounge around doing nothing to escape physical activities and to avoid work. Lazy people show disinclination and unwillingness to any physical activity or work, almost all the time. Does it have something to do with our genes, our food and our habits? The answer is "laziness is indeed linked with all the three".

For active people, the premotor cortex which controls movement, becomes active before other spots in the brain become active. For lazy ones, the premotor cortex is fired more than the active ones. It is figured out that the brain connections responsible for making actual action from decisions, are less effective in the apathetic. This means that the brain would have to work harder to make them work.

Many struggle when it comes to physical activity even though it is an essential part of human biology. It is found out that active genes produce active offspring which crave for physical activity and lazy genes produce comparatively less active offspring. Our physical laziness may be linked to a "couch potato gene". It is a mutation in a normal gene which regulates activity levels. Because of mutation, there is no dopamine receptor, thereby decreasing the pleasure levels during exercise. (Dopamine is a neurotransmitter which controls pleasure centres). Making exercise a habit will eventually increase our brain's receptivity to dopamine release.



Food has greater influence over the hormone levels in our body. If the hormones go out of balance by the food you take, it will affect us both physically and mentally. Excessive consumption of certain foods disrupt the functions of brain, apart from making one feel lazy by blocking the essential hormones. Those food include junk food, processed starchy food, food with artificial sweeteners and fatty food.

To overcome laziness, keep your body hydrated with Water. Include fruits, vegetables, dry fruits, diary products, wheat grains and chocolate (at a limited quantity) in your diet. While doing difficult or boring tasks, organise the tasks and break them into bits. So if you think that you are genetically lazy, get off your couch and fight your DNA. You will be rewarded accordingly at the end.

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LIFE'S LIKE RIDING A BIKE



Owning and riding a bike is the best thing one could do. People do act funny on the road when they see a girl riding a motorcycle. GET OVER IT! A lion never loses its sleep over the opinion of a sheep! In the beginning you stumble, but with more experience you can really get far! Girls can accomplish a lot more than guys and that is a scientific fact. Can you think of a leader tougher than former British Prime Minister Margaret Thatcher? She's certainly tougher than any other leaders elected in the United Kingdom in the recent past. Life is a series of learning from our mistakes. That's how we learned to walk and talk and that's how we grow in life.

We are all learning and in the beginning we may make mistakes because nobody is perfect. Professional women riders have definitely proved that all women are not bad drivers. Life sometimes throws you curves too, and in order to remain on top, you need to go with the flow. If a tragedy happens, accept its pain, and go with God's larger plan which is designed for the ultimate good! When the road throws you a curve, go with it! When a turn is coming up, you lean with the curve. You don't fight it and go the other way but you learn to ride on its way without losing yourself.

LIFE'S LIKE RIDING A BIKE



Some people ride bikes just for the thrill of it while other believe that life is just for the thrills. They don't realize that they have more places to get to. A bike is a tool and it's not the end goal. You're supposed to get to someplace with your life. Be clear on your destination and if you use it well, you can really get far! After you've been riding a bike for so long, you can start doing the special stuff and life is just like that. The important thing is about balancing yourself, the bike and getting used to the roads that you travel. Once you get the hang of who you are and where you're going, you can pop some big miracles too! The important thing is that you enjoy the ride and you get to where you need to go. Live life to its fullest but with responsibility and accountability.

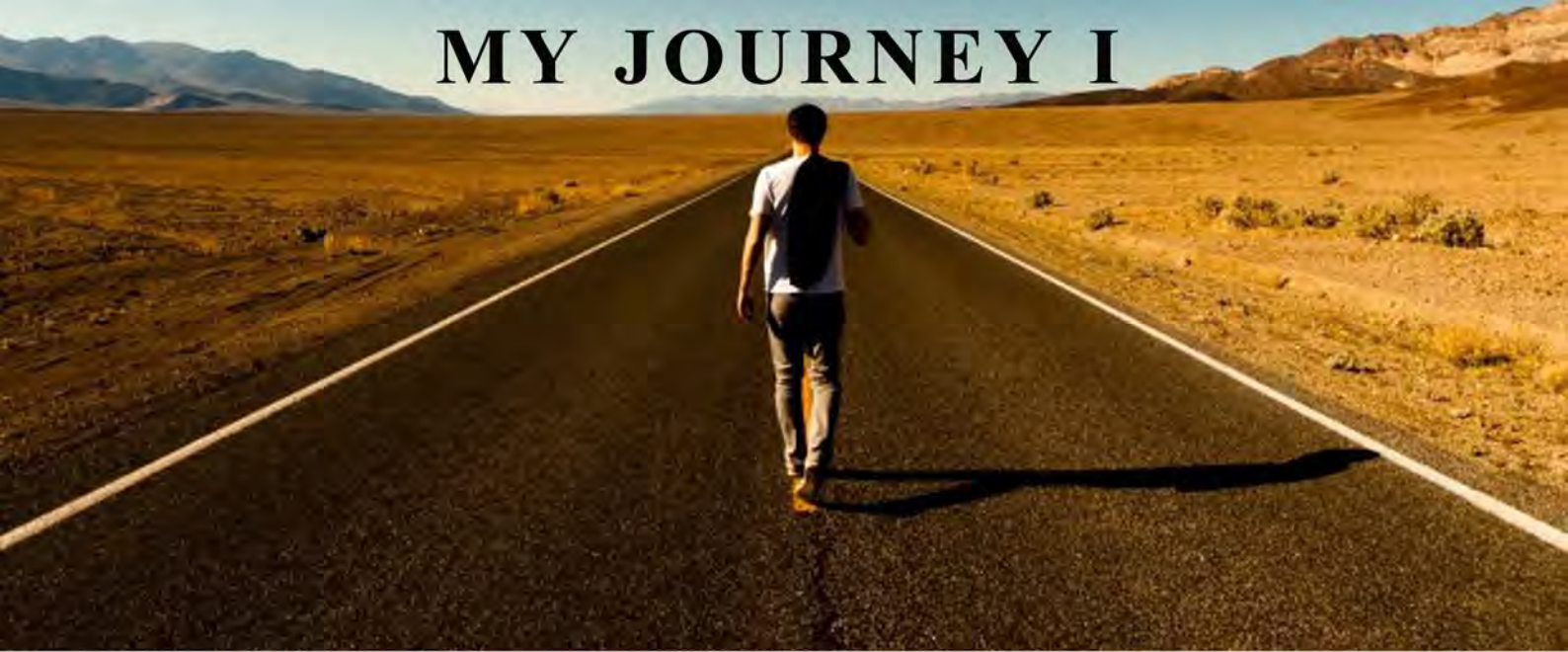
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MY JOURNEY I



I have stored few most memorable days of my life in a secured place, a drive in the undergrounds of my heart where no malware can have access. Probably you too will do the same thing if you don't want to lose something without which you feel that you are nothing. The school where I studied from Class 6 to Class 12 facilitated a wonderful journey of seven years. I still remember the day I stepped into the campus, holding my father's big finger with all my left hand. I walked along with him towards the Admin block and looking at other students who were already there with my small blinking eyes only with a single thought in my mind – what will happen to me and how will my life move hereafter!

Post lunch, Balaji, who was a friend of mine from the past year helped us know how things go on there. I could hardly understand or remember any of the information that my friend gave. When my Dad wanted to leave for home after getting me settled there around 5 O'clock in the evening, I just wanted my Dad to know that I'm okay. An artificial smile on my face helped me convince him. The routine of my life there was like this – starting with morning exercises, getting ready for school, attending prayer after the breakfast.



My interest towards music drove me crazy in such a way that I finally became the Piano player in the prayer for the school song until I had a small clash with the music teacher in the final days of class 9. After enjoying the lunch, we had to attend the study hour of about one and a half hours. We loved to play in the ground to fill up the evenings under the blessing rays of the sun, the game of our choice. It was really so funny for us to throw water on each other when we had bath. I was one of the bathroom singers. The day ends with dinner followed by roll call before which we will have a study hour from 6:30pm to 8:00pm.

I feel like revealing that this study hour was the most wanted time for rankers, a time pass for crackers and obviously a blossoming autumn for crushers. Sundays were the 'new life' days for every week. We all would be busy not less than an hour to make up ourselves and look beautiful – smiling faces are still heart touching. Of course we were allowed to watch TV till 7 O' clock in the evening. Meeting parents on Sundays was the one thing that really refreshed us for the oncoming entire week.


MY JOURNEY I



The rapport that I had with my Chemistry teachers, Hindi teachers, Junior science teacher and Biology faculty often made me feel that I am missing the colorful days of my life. I feel like saying that 16th Feb-2014 and 16th Feb-2015 are secured safely in my heart locker, for the unforgettable memories they brought. It's no wonder that every student who studied there will at least once in their life think that a magic should happen which could take them into the past and all could suddenly start studying from class 6. I proudly declare that's where the heavenly journey of seven years started. Well, I understand that you are waiting for the name of the school. It's "JAWAHAR NAVODAYA VIDYALAYA". I also request you to surf www.jnvguntur.nic.in and know much more. I'll talk more about few more interesting things in my next article.

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**If you get up in the morning
and think the future is going
to be better, it is a bright day.
Otherwise, it's not.**

WANT TO BE AN ENTREPRENEUR? THINK LIKE ELON MUSK

You would have guessed what the article is about from its title. It's not only about entrepreneurs but also about their significant contribution to the growth and development of a country and cosmopolitan thinking. Those who are self-employed or run small scale business ventures would have started their business endeavors out of self-interest, to satiate their self-esteem or with an intension to generate jobs and thereby would benefit out of it. Initially, they would have faced a lot of problems like financial management, managing employees, to get orders consistently and ultimately gaining profit. If they come across all these obstacles successfully, they are said to be successful in their business. All these successful entrepreneurial start-ups help the economic growth of a country and the people work in the companies in the long run.

Elon Musk: Elon Musk is an American Entrepreneur, CEO and CTO of SpaceX, CEO and Product designer of Tesla cars, CEO of Neuralink, Chairman of Solarcity and co-chairman of OpenAI. He started his business with US\$2000 which his father gave him as the initial investment. But as of now, he has nearly \$15.2 billion and he is the 80th wealthiest person in the world. He is also ranked the 21st person on the Forbes list on 'The world's Most Powerful People'.




**In 2018 your Tesla will
"drive anywhere across the country
to meet you, charging itself along the way.
It will sync with your calendar
to know exactly when to arrive."**

Elon Musk

He started his business with a noble intension of contributing to the world and humanity. As an iconoclast, his Mission and Vision was related to energy and resource management. He has taken the challenge of reducing Global Warming through sustainable energy. He has also harbored the ambitious plan of taking human beings to Mars and make a settlement for human inhabitation in an Economically affordable way.

Musk was born on June, 1971 in Pretoria Transvaal, South Africa, as the son of Maye Musk. At the age of 10, he programmed for Commodore VIC-20 and taught computer programming and developed and sold Video Games named Blaster. He has also published his research in a magazine called "PC and Office Technology" for approximately \$500. He was initially educated at private schools and later graduated from Pretoria boy's high school. In 1989, on his 18th birthday he moved to Canada and become a Canadian citizen as his mother had a citizenship there. In 1995, at the age of 24, he started his PhD in applied physics and material science at Stanford University. In 2002, he become a US citizen and there was no looking back after that.



The first step is to establish that something is possible; then probability will occur.

He and his brother started Zip2 a web software company and later got a contract with New York Times and Chicago Tribune. In March 1999, he co-founded X.Com an online financial service and e-mail payment. In 2001, he started a project called "Mars Oasis" and from which he derived the name SpaceX. He thought of purchasing missiles for this project but the refurbished missiles themselves cost him US \$8 million and he found them very expensive. This made Musk to start a company that would make affordable rockets.

He planned to develop SpaceX rockets as a modular type by applying software engineering and science. This, he believed could bring down the price of launching and gain 70% gross margin. He invested around US\$100 million for space exploration. He finally succeeded and made SpaceX the world's first company to produce Re-Usable rockets. He also got an invitation from NASA, the US space agency to support them by sending Astronauts to the ISS using the re-usable rockets. Musk says that it is possible for ordinary people to become extraordinary if they choose to become. It might need a lot of sleepless nights and drilling the brain for ideas before working on a workable plan which would attract even the powerful agencies in the world. You only need to convince them that you have quality.

“i could either
watch it happen,
or be part of it.”
-Elon Musk



After some years, his eyes got back to the automobile industry which gifted the world with TESLA that came into the market with its inovative concepts. Tesla has Tesla Roadster which sold about 2500 vehicles to 31 countries in 2008. Tesla started sedan type electric car named Model S and Model X in June 2012. Tesla also supplies electric powertrains to Daimler, Mercedes Benz and Toyota. The average price of all the models are between US \$25000 to US \$ 35000. In 2014, musk announced that Tesla’s technology patents can be used by anyone. There is no restriction to establish the EV vehicles growth and at the same time this will help reduce Global Warming. Finally, he has given his challenges to everyone to contribute towards Global Environment. It’s our turn as enginers to contribute and add innovations that would help the environment.

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UNEARTHED

DARK SECRETS OF THE PYRAMID

I recently watched a video which was shared by one of my friend in what-sapp and I would like to share that information through this article. First of all, let me list out what are the secrets of the Egyptian pyramids, such as who built the pyramids?, References to Medical references, Shape shifting Jesus, Heb – Sed, White pyramids and The female Pharaoh.

1. Who built the pyramids?

Despite the prevalent myth that the pyramids were built by Israeli slaves, Egyptologists have determined that all the pyramids in Egypt were built by paid Egyptian laborers. Evidence shows that around 20,000 to 30,000 laborers were recruited from poor families around Egypt to complete the enormous construction over a period of 20 years. Laborers were extremely respected for their work and fed like the royal family. The work was incredibly hard and dangerous, but those who died during the construction were paid the highest honour of being buried near the sacred pyramids. There is also another conspiracy theory that the pyramids and tall structures around the world were used by extraterrestrial beings as their landing points, just like the modern airports.



2. Medical References - The ancient Egyptians were renowned for their medical knowledge and rulers of other empires used to request the pharaohs of Egypt to send their Egyptian physicians to treat their loved ones who were sick. Despite the extensive knowledge the Egyptian doctors had about the medicinal properties of the plants around them, they also practiced a magical spell. Although most of the ailments were cured with the help of herbal medicines, there were few that were based on 'sympathetic magic'. For example, it was believed that a crushed pig's eye in a treatment would transfer the power of sight into the patient's eye.

3. Shape shifting Jesus - In 2013, an ancient Egyptian text was deciphered, re-telling the crucifixion of Jesus. The surprising plot twists and rolls back 1,200 years. The ancient text portrays, a remarkably different picture of Pontius pilate, the judge who ordered Jesus' execution. The text states that Jesus shared his last meal with Pontius pilate who offered to sacrifice his own son in order to save Jesus' life which is contradictory to the traditional belief that Jesus shared his last supper with his 12 disciples. Even more shocking are the allegations in the text that Jesus was a shape shifter with the ability to change from white to red or young to old.



4. Heb-Sed - Once a pharaoh had ruled for 30 years, they had to take part in a strange ritual, known as Heb – Sed to prove that they still had the necessary power and strength to rule the kingdom. The ceremony, which once initiated, would take place every three years until the pharaoh's death. The Pharaoh should get dressed in a short kilt with a bull's tail on their back and run as fast as possible around a race track. In early practices of the ceremony, any pharaoh who was unfit to complete the course was sacrificed and replaced with a fitter successor.

5. White pyramids - When a great pyramid of Giza was completed in 2560 BCE, it was plated with a smooth surface of polished, white limestone, which gleamed in the sun's light. However, in 1301 CE, a massive earthquake hit Egypt and loosened many of the casing stones. The damage to the outer pyramids prompted the rulers to reuse them as impressive as it still looks today. The Pharaohs and the pyramids had a direct connection.



6. The Female pharaoh - One of the most successful pharaohs to rule the ancient Egypt was a female pharaoh whose story was almost lost to history and uncovered on temple walls during the 19th century. Hatshepsut came to the throne of ancient Egypt around 1478 BCE and during her reign, Egypt enjoyed great peace and prosperity. Hatshepsut cultivated beneficial trade routes and oversaw incredible construction projects throughout her kingdom. However, 20 years after her death, her successors began a campaign of erasing Hatshepsut from history. Her statues were destroyed and her name was scraped off the buildings built under her rule.

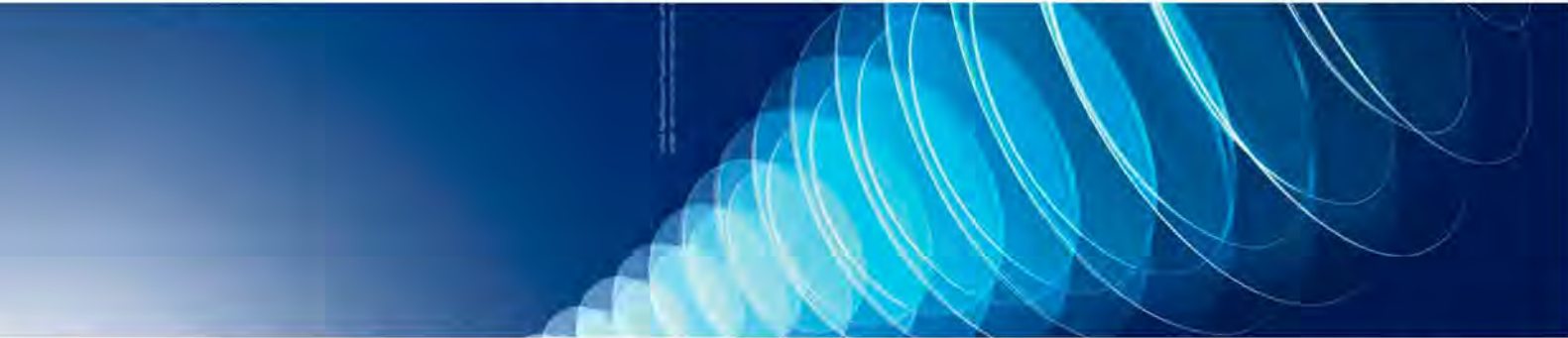
There are many interesting secrets about Egyptian pyramids hidden for many years. I have summarized very few among them in this article. I will brief about the remaining secrets in my next article.

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ULTRASONIC WAVES



Ultrasonic waves are sound waves (or pressure waves) transmitted above the human detectable frequency range (above 20,000HZ). Higher frequency means shorter wavelength and this changes the properties of the waves. The advantage of ultrasonic waves is that we cannot hear them.

METHODS OF GENERATING ULTRASONIC WAVES:

1) Piezoelectric oscillator: When a specially cut piezoelectric quartz crystal is compressed, the crystal becomes electrically charged and an electric current is generated. Greater the pressure, greater the current produced. If the crystal is suddenly stretched rather than compressed, the direction of the current will be reversed. It has the tendency to alter the current and when such a current is applied to the crystal, ultrasonic waves are generated.

2) Magnetostriction oscillator: Alternatively, these ultrasonic waves can be produced by means of magnetostriction. Here, an iron or nickel is magnetized by placing them in varying magnetic field to change its dimensions, thus generating ultrasonic waves. In most applications, ultrasonic waves are generated by a transducer that includes a piezoelectric crystal which converts electrical energy into mechanical energy.

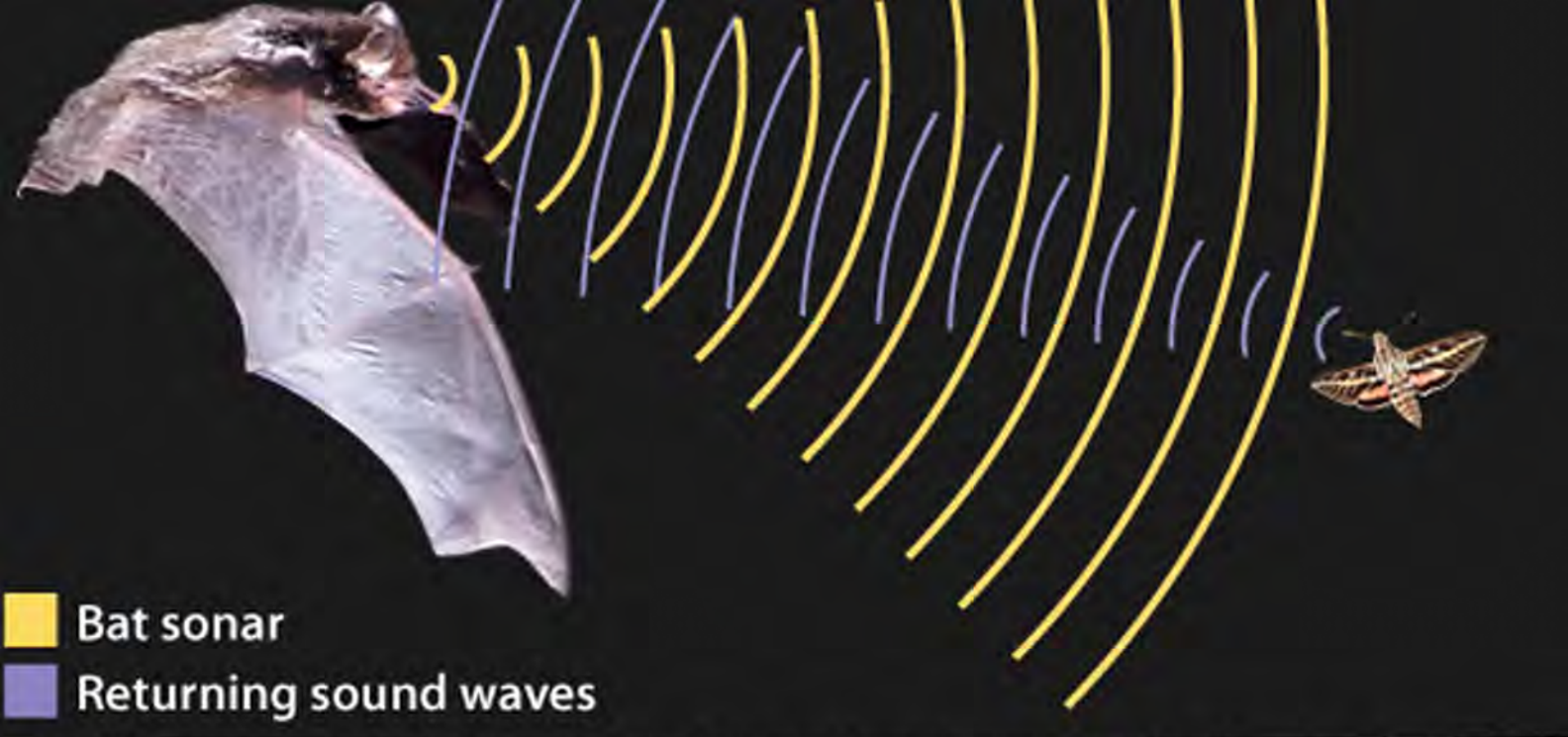


APPLICATIONS OF ULTRASONIC WAVES

1) Ultrasonic flaw detection: Pulsed echo ultrasonic flaw detector works on the principle of reflected signal indication. The pulses use frequencies from 0.8 to 2.5 MHz to inspect steel, aluminium and brass articles. Generally, a transducer acts as a transmitter sending out a pulse of high frequency ultrasonic waves into the article kept for inspection and then acts as a receiver receiving the ultrasonic echo pulses from the flaw. The distance of echo pulse from the transmitted pulse gives the location of the flaw from the near end. Thus the process of inspection becomes very simple.

2) Ultrasonic are used in directional signaling: They are used in the detection of aircraft, submarines and schools of fish. The waves are passed towards the target and is reflected by an aircraft or submarine coming across their path. This reflected beam is detected by a quartz detector. The device used for this purpose is called SONAR.

3) Estimating the depth: The reflection of ultrasonic wave is used to estimate the depth of the sea. By measuring the elapsed time between the transmission and reception, the depth of the sea can be computed. The instrument used for this purpose is called Fathomer.



4) Ultrasonic soldering and welding. Heat is produced when an intense beam of ultrasonic passes through a substance. Joints of thermoplastic materials can be welded and water can be boiled.

5) Applications in medicine - An ultrasonic drill is used for preparing teeth for filling. Ultrasonic cleaning machines have been used to clean minute parts like hypodermic needles, etc. Ultrasound scanners are used for diagnosing tumor and in the treatment of certain cancers. They are used in bloodless brain surgery.

6) Killing Mosquitoes and flies: They are used for killing mosquitoes and flies. It attracts the insects with the vibrating noise.

Thus ultrasonic find variety of applications in the field of medicine, industry and in our daily life. Every scientific invention is good for the advancement of human society if it takes care of the environment and ecosystem of the earth.

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WORLD WAR II

In the year 1939, a revolution broke out in an European country, Germany. The reason behind the revolt was a community named JEWS because they criticised Germany for its active participation in World War I which caused severe damage to rest of the European countries. Women from Germany were maltreated and men were used for household works. JEWS even declined the German currency because of its minimal value when compared to the rest of the countries. At this situation an Austrian Politician named ADOLF HITLER rose as a leader for Germans. The speeches delivered by Hitler made a huge impact on Germans. He raised Nazism in Germany and declared a war against other European countries. They started their first attack on neighbouring countries for the need of weapons. They collected many panzers and huge amount of gunpowder. The first critical attack was made on Austria. They invaded Austria in no time and killed many Austrian soldiers and Austrians surrendered to Germans after this ballistic attack.

After this, they turned their eyes on Poland. But Great Britain and France came to the rescue of Poland because by that time, these two countries realised that Hitler will always be a threat and he had to be stopped. The British tried to send an army to Poland but the German army was too quick and before the rescue team reached Poland, they conquered the nation. Finally, Poland also surrendered to Germany. Hitler formed an alliance with Japan. During the world war II, the primary combatants were the Axis nations of Nazi Germany, Fascist Italy, Imperial Japan, and the Allied nations, Great Britain (and its Commonwealth nations), the Soviet Union, and the United States. Germans then attacked Russians because they followed some other system which was opposite to Nazism. Russians did not want to surrender instead, sent an army named Red Ribbon Army against Germany but the Russians were defeated.

WORLD WAR II

This battle caused the death of 3 Million Russians. It was recorded as the bloodiest war ever happened. Meanwhile in South European countries Britain and France made an alliance with America. Even this alliance was unable to ensure their victory over the Germans because of the spirit that Hitler generated in the name of Nazism. Seven days after the suicide of Adolf Hitler, Germany unconditionally surrendered on May 7, 1945. But by the time Hitler had committed suicide, he had made enough damage to the entire world. Hitler's hunger for power took the toll on the entire world.

In the other side of the Pacific ocean Japan and America had a clash. Japan made a sudden attack on pearl harbour in America. Japanese started its great war against the Americans without visualizing what was coming. In the mean time, American scientists had invented Atom bomb, meanwhile in Japan they planned to send some plague infected files in 3 submarines to America. U.S. dropped Atomic Bombs on the Japanese towns of Nagasaki and Hiroshima. Despite winning the war, Britain lost most of its empire, which was outlined in the basis of the Atlantic Charter. The war precipitated the revival of the U.S. economy and the nation amassed a gross national product that was nearly greater than all the Allied and Axis powers combined. The USA and USSR emerged from World War II as global superpowers. The main business for both the countries as any war would bring was weapon business. That's why wars are not good for the world. Let peace prevail the world because the world won't be able to withstand another war.

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